

&lt;400&gt; 1058

Glu Phe Pro Ala Arg Val Thr Pro Val Ala Glu Gln Leu Gly Val Ser  
 1 5 10 15  
 Leu Thr Leu His Pro Asp Asp Pro Pro Arg Pro Leu Phe Gly Leu Pro  
 20 25 30  
 Arg Ile Ala Ser Ser Ala Glu Asp Tyr Gln Ala Leu Phe Asp Ala Val  
 35 40 45  
 Pro Ser Lys Ala Asn Gly Ile Cys Leu Cys Thr Gly Ser Leu Gly Val  
 50 55 60  
 Arg Ala Glu Asn Asp Leu Pro Glu Met Ala Glu Arg Phe Gly Pro Arg  
 65 70 75 80  
 Ile Ala Phe Ala His Leu Arg Ala Thr Lys Arg Asp Ala Asp Gly Leu  
 85 90 95  
 Ser Phe His Glu Ser Asp His Leu Asp Gly Asp Val Asp Met Val Ala  
 100 105 110  
 Cys

&lt;210&gt; 1059

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1059

nagctgaccg gctggcagat caacatcatg acgccggaag aaagcgtgaa ccgccgggaa  
 60  
 gtcgagcggtt cgggcctgcg caccacgttc atgaacaagc tggacgtcga tgaggaagtc  
 120  
 gccgacatcc tgatcgacga aggtttcacc ggtatcgagg aaatcgcccta cgtcccatg  
 180  
 caggaactgc tggagatcga ggcgttcgac gaagacacca tcaacgagtt gcgcgccgct  
 240  
 gcccgcaatg cgctgctgac cgaggccatc gccaggaag agcgccttga gaccgcgcag  
 300  
 gatctgcttg aactcgaagg cgtgacgccg gaactggctg ccaagctggc cgagcgtcaa  
 360  
 gtgcgtacgc gt  
 372

&lt;210&gt; 1060

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1060

Xaa Leu Thr Gly Trp Gln Ile Asn Ile Met Thr Pro Glu Glu Ser Val  
 1 5 10 15  
 Asn Arg Arg Glu Val Glu Arg Ser Gly Leu Arg Thr Thr Phe Met Asn  
 20 25 30  
 Lys Leu Asp Val Asp Glu Glu Val Ala Asp Ile Leu Ile Asp Glu Gly  
 35 40 45  
 Phe Thr Gly Ile Glu Glu Ile Ala Tyr Val Pro Met Gln Glu Leu Leu  
 50 55 60  
 Glu Ile Glu Ala Phe Asp Glu Asp Thr Ile Asn Glu Leu Arg Ala Arg

```

65              70              75              80
Ala Arg Asn Ala Leu Leu Thr Glu Ala Ile Ala Gln Glu Glu Arg Leu
              85              90              95
Glu Thr Ala Gln Asp Leu Leu Glu Leu Glu Gly Val Thr Pro Glu Leu
              100              105              110
Ala Ala Lys Leu Ala Glu Arg Gln Val Arg Thr Arg
              115              120

```

&lt;210&gt; 1061

&lt;211&gt; 456

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1061

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tctagactcc atggcaccgg gctgagcggg taagtaagaa agataaaaag tgccttttgc
60
cccttcgagg aaaccctttt gcaggccaag caagggtgc aagtgtttgg gagctgagag
120
gagaaggagg attctggagc attgtatttg gcagccggag cgggcagtgg gcgggggggtt
180
gggacacgaa gggctcttcg gacccctgtg cctcttctgc cccaagggcg agaagacggg
240
cttcgcagcg accctcgggg gtccatggag ccgcctgcct tcgccccctc gctcttccca
300
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360
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420
accccgaagc cgtcttctcg gggctccggg gcgcgc
456

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&lt;210&gt; 1062

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1062

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Met Arg Leu Pro Ser Val Leu Ser Pro Pro Val Ser Lys Ala Leu Gln
 1              5              10              15
Phe Leu Leu Pro Ile Gln Val Gln Thr Trp Glu Glu Arg Gly Gly Glu
              20              25              30
Gly Arg Arg Leu His Gly Pro Pro Arg Val Ala Ala Lys Pro Val Phe
              35              40              45
Ser Pro Leu Gly Gln Lys Arg His Arg Gly Pro Lys Ser Pro Ser Cys
              50              55              60
Pro Asn Pro Pro Pro Thr Ala Arg Ser Gly Cys Gln Ile Gln Cys Ser
65              70              75              80
Arg Ile Leu Leu Leu Leu Ser Ala Pro Lys His Leu Gln Pro Leu Leu
              85              90              95
Gly Leu Gln Lys Gly Phe Leu Glu Gly Ala Lys Gly Thr Phe Tyr Leu
              100              105              110
Ser Tyr Leu Pro Ala Gln Pro Gly Ala Met Glu Ser Arg
              115              120              125

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<210> 1063  
<211> 3760  
<212> DNA  
<213> Homo sapiens

<400> 1063  
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120  
taaggctctta taactagtaa atatctgcat taaagaacga gttgaatgaa aattctgata  
180  
aattcctact taaagtgtat ccaaagaaaa cggaaaaagt ctaggagtta gtgatattag  
240  
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300  
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420  
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480  
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540  
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600  
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660  
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720  
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900  
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960  
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gttgcacac agatgaaaaa gtaaggccga agaagaccag agaagagttg gttgaatgtg  
1080  
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1320  
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1380  
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1440

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2160  
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 3240  
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<210> 1064

<211> 483

<212> PRT

<213> Homo sapiens

<400> 1064

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His	Gly	Ser	Pro	Ser	Cys	Thr	Leu	Arg	Arg	Ser	Ala	Val	Lys	Ser	Arg
			20					25					30		
Leu	Gly	Cys	Ala	Val	Ala	Gly	Ser	Phe	Thr	Ser	Thr	Trp	Asn	Phe	
		35				40					45				
Leu	Lys	Ser	Ser	Leu	Leu	Pro	Gly	Met	Gln	His	Ala	Val	Phe	Ser	Ser
	50				55						60				
Met	Gly	Met	Phe	Ser	Ala	Ser	Ser	Leu	Val	Thr	Ala	Leu	Leu	Leu	Leu
65				70					75					80	
Arg	Thr	Pro	Leu	Thr	Pro	Ser	Ser	Arg	Pro	Arg	Ala	Gly	Arg	Trp	His
			85					90					95		
Leu	Ser	Cys	Ser	Ser	Ser	Ala	Ser	Ser	Phe	Arg	Ala	Leu	Leu	Cys	Trp
		100					105					110			
Thr	Ser	Arg	Leu	Leu	Leu	Ser	Arg	Ser	Leu	Cys	Ser	Val	Ala	Arg	Ser
		115				120					125				
Ser	Ala	Ser	Ser	Arg	Leu	Ser	Tyr	Gln	Val	Lys	Leu	Gln	Met	Ala	Leu
	130				135						140				
Glu	Leu	Met	Arg	Lys	Glu	Leu	Glu	Asp	Ala	Leu	Thr	Gln	Glu	Ala	Asn
145				150						155				160	
Val	Gly	Lys	Lys	Thr	Val	Ile	Trp	Lys	Glu	Lys	Val	Glu	Met	Gln	Arg
			165					170					175		
Gln	Arg	Phe	Arg	Leu	Glu	Phe	Glu	Lys	His	Arg	Gly	Phe	Leu	Ala	Gln

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<210> 1065
<211> 892
<212> DNA
<213> Homo sapiens
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1006

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 360  
 caccagagc agcatcaaga tgcagttggc ggggtactgg aactggcttg gcaagggctg  
 420  
 cgcaggcaac aggtcccagc aagagtcagc tagcctagct cagccctgca cacctggaga  
 480  
 cctgggggtg ctccagacac ctcgccctt taggtccctt taattgaatg tgtgtggatc  
 540  
 agtgaagggt gaggaatcat ttctctatgg cccaagacgt ttctctctgc agttgtcatg  
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 660  
 gccctttgta ggaggggcat cacaggctgg ctcacctcag cagtgccagg cagagcccgt  
 720  
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 892

<210> 1066  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 1066  
 Met Cys Ala Leu Cys Arg Arg Gly Ile Thr Gly Trp Leu Thr Ser Ala  
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 Val Pro Gly Arg Ala Arg Pro Ser His Cys Arg Arg Arg Met Lys Arg  
 20 25 30  
 Val Trp Asp Arg Ala Val Glu Phe Leu Ala Ser Asn Glu Ser Arg Ile  
 35 40 45  
 Gln Thr Glu Ser His Arg Val Ala Gly Glu Asp Met Leu Val Leu Arg  
 50 55 60  
 Trp Thr Lys Pro Ser Ser Phe Ser Asp Ser Glu Arg  
 65 70 75

<210> 1067  
 <211> 418  
 <212> DNA  
 <213> Homo sapiens

<400> 1067  
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 120  
 ggactagaca tctggaaagc ccgagtctcc gctgacatcg aaggcgactg gactatgcac  
 180  
 gttgaaggct ggtcagacac ctggggcacg tggcatcaca atgccaatgc caagctcgcc  
 240

gctgccatcg acgtcgaaact ggtgtgcgcc gaaggccatg ccctcataaa cgaggcggtc  
 300  
 cggcacgccc agcaatccgg ggatactgac gcgatcacgg ctctgcgcga gaccgatgcc  
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 418

<210> 1068

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1068

Glu	Phe	Glu	Val	Thr	Ala	Asn	Val	Phe	Arg	Glu	Gly	His	Asp	Ala	Val
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Gly	Ala	Ser	Val	Val	Leu	Thr	Asp	Pro	Glu	Gly	Asn	Arg	His	Leu	Thr
			20					25					30		
Asp	Met	His	Gln	Val	Glu	Pro	Trp	Gly	Leu	Asp	Ile	Trp	Lys	Ala	Arg
		35					40					45			
Val	Ser	Ala	Asp	Ile	Glu	Gly	Asp	Trp	Thr	Met	His	Val	Glu	Gly	Trp
	50					55					60				
Ser	Asp	Thr	Trp	Gly	Thr	Trp	His	His	Asn	Ala	Asn	Ala	Lys	Leu	Ala
65					70				75					80	
Ala	Ala	Ile	Asp	Val	Glu	Leu	Val	Cys	Ala	Glu	Gly	His	Ala	Leu	Ile
			85						90					95	
Asn	Glu	Ala	Val	Arg	His	Ala	Glu	Gln	Ser	Gly	Asp	Thr	Asp	Ala	Ile
			100					105					110		
Thr	Ala	Leu	Arg	Glu	Thr	Asp	Ala	Asn	Leu	Thr	Leu	Asp	Arg	Ala	Pro
		115				120						125			
Asp	Ser	Leu	Gln	Gln	Val	Ile	Asn	Thr	Tyr	Ala					
	130					135									

<210> 1069

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1069

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 120  
 ttttctggag ctgaacatct caggtgccat gtaaggcttg gtgccagcca tggaggagac  
 180  
 ctgcgttatc acctgcaaca gaacgtccac ttcaaggaag aaacagtga gctcttcac  
 240  
 tgtgagctgg tcatggccct ggactacctg cagaaccagc gcatcattca cagggatatg  
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 360  
 gctgcgatgc t  
 371

<210> 1070

<211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1070

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Pro Ala Ser Gln Gln Phe Ile Cys Arg His Ser Gln Gly Pro Pro Val
      20           25           30
Asn Ser Lys Gly Ile Ala Cys Ser Phe Ser Gly Ala Glu His Leu Arg
      35           40           45
Cys His Val Arg Leu Gly Ala Ser His Gly Gly Asp Leu Arg Tyr His
      50           55           60
Leu Gln Gln Asn Val His Phe Lys Glu Glu Thr Val Lys Leu Phe Ile
      65           70           75           80
Cys Glu Leu Val Met Ala Leu Asp Tyr Leu Gln Asn Gln Arg Ile Ile
      85           90           95
His Arg Asp Met Lys Pro Asp Asn Ile Leu Leu Asp Glu His Gly His
      100          105          110
Val His Ile Thr Asp Phe Asn Ile Ala Ala Met
      115          120

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<210> 1071  
 <211> 998  
 <212> DNA  
 <213> Homo sapiens

<400> 1071

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120
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600
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660
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720
cgagattagc cacatacatg accatgtggt ccttgggtca gcacgcgaag aaaatgccaa
780

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gcgtaccctt tgggttggtg cgcttacggt ggtgatgatg gttggcgaaa tcgtcgccgg  
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ctatctcact ggctcaatgg ctttacttgc cgacggggtt tcacaaggca accccatgca  
900  
ggcgctttgg gcatcgctgc agctgcctac ggttacgcaa aacgccacgc ttccagcagt  
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<210> 1072

<211> 72

<212> PRT

<213> Homo sapiens

<400> 1072

Met	Gly	His	Thr	Ala	Ser	Asn	Lys	Asp	Asp	Leu	Leu	Lys	Arg	Val	Lys
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Arg	Ile	Ala	Gly	Gln	Ile	Gln	Ala	Val	Glu	Arg	Ala	Leu	Glu	Ser	Asp
		20					25				30				
Ala	Asp	Cys	Ala	Lys	Thr	Leu	His	Leu	Val	Ala	Ala	Thr	Arg	Gly	Ala
		35				40				45					
Ile	Asn	Gly	Leu	Met	Asp	Glu	Ile	Ile	Glu	Asp	His	Ala	Arg	Lys	His
	50				55				60						
Val	Ala	Ser	Pro	Thr	Leu	Ser	Asp								
65					70										

<210> 1073

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1073

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120  
ttccccact gataaaatct tgcttctctt caaactccta ggcaaatttc tcctacttca  
180  
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240  
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360  
ggctctggaa cccagaacat accacgggtt caaggatatgt tttaatgaat tgaatggaat  
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468

<210> 1074

<211> 134

<212> PRT

<213> Homo sapiens



&lt;400&gt; 1074

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Gly Cys Phe Ser Pro Thr Asp Lys Ile Leu Leu Leu Phe Lys Leu Leu
          20           25           30
Gly Lys Phe Leu Leu Leu Gln Lys Val Leu Phe Leu His Ile Leu Arg
          35           40           45
Asn His His Leu Val His Met Leu Lys Ala Glu Phe Ile Val Ser Ser
          50           55           60
Pro Ser Leu Ser Asn Ser Phe Ala Gln Thr Leu Arg Tyr Ser Phe Ile
65           70           75           80
Leu Cys Ile Ile Phe Gly Phe His Leu Phe Met Asn Ser Phe Val Phe
          85           90           95
Ser Leu Leu Ala Leu Glu Pro Arg Thr Tyr His Gly Phe Lys Val Cys
          100          105          110
Phe Asn Glu Leu Asn Gly Ile Asn Phe Val Val Leu Met Gln Ile Gln
          115          120          125
Met Pro Leu Asn Thr Asp
          130

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&lt;210&gt; 1075

&lt;211&gt; 1633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1075

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cagcagcaag aacaaacagc ttcgcaacga cttcaagctg gtggagaaca ttctggccaa
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gcgcctgctg atcctgcccc aggaggagga ctatggcctt gacatcgagg agaagaacaa
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240
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360
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720
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780
gactgtggac aacgtgcacc tggaacacgg cgtgggtgtat gagtatgtga gcacggcagg
840

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 1320  
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 1633

&lt;210&gt; 1076

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1076

His	Gln	Ala	Gly	Glu	His	Trp	Pro	Glu	Asp	Cys	Leu	Leu	Pro	Gly	Val
1				5					10					15	
Cys	Ser	Pro	Thr	Glu	Glu	Gln	Gly	Gln	Pro	Thr	Leu	Gln	Thr	Ser	Pro
			20					25					30		
Pro	Gly	Ala	Pro	Pro	Ala	Val	Trp	Pro	Thr	Ser	Ala	Pro	Pro	Ile	Ala
		35					40					45			
Thr	Ser	Thr	Ser	Trp	Lys	Cys	Pro	Thr	Pro	Arg	Pro	Pro	Pro	Gln	Trp
	50					55					60				
Ala	Gly	Pro	Ser	Ala	Ser	Ala	Leu	Asp	Ala	Asn	Pro	Pro	Ser	Ser	Ala
65					70					75				80	
Leu	Thr	Arg	Ser	Lys	Ala	Thr									
					85										

&lt;210&gt; 1077

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1077

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 gcaaacgagg caacatgttt gcgcctcgcc ggagcaccct caccagcgga tgctttgttt  
 120  
 caccagagt ttacatatcc aatttttgga gaggtgagg caatttacgg ctacaacggc  
 180  
 ttgcacatga atcttgctt tgcgagcggc agcctggtgc cgtcgctcga aatcacttac  
 240  
 cgcgctaaga atacgacgac gtccgctaaa gtagatgacg tggagcaggc tctgcgcgga  
 300  
 gtgctccgc cagatgtcgt tactcctgca gaacttgatg ctatcgttgc acgcgacgcc  
 360  
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 419

<210> 1078

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1078

Xaa	Arg	Val	Thr	Arg	Leu	Ala	Thr	Arg	Leu	His	Ser	Met	Ser	Thr	Lys
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			20					25					30		
Pro	Ser	Pro	Ser	Asp	Ala	Leu	Phe	His	Pro	Glu	Phe	Thr	Tyr	Pro	Ile
		35					40					45			
Phe	Gly	Glu	Ala	Glu	Ala	Ile	Tyr	Gly	Tyr	Asn	Gly	Leu	His	Met	Asn
	50					55				60					
Leu	Ala	Phe	Ala	Ser	Gly	Ser	Leu	Val	Pro	Ser	Leu	Glu	Ile	Thr	Tyr
65					70				75					80	
Arg	Ala	Lys	Asn	Thr	Thr	Thr	Ser	Ala	Lys	Val	Asp	Asp	Val	Glu	Gln
			85					90					95		
Ala	Leu	Arg	Gly	Val	Leu	Pro	Pro	Asp	Val	Val	Thr	Pro	Ala	Glu	Leu
		100						105				110			
Asp	Ala	Ile	Val	Ala	Arg	Asp	Ala	Arg	Ala	Val	Arg	Ala	His	Leu	Arg
	115					120					125				
Arg	Arg	Ala	Pro	Arg	Leu	Arg	Arg	Thr	Leu	Ala					
	130				135										

<210> 1079

<211> 584

<212> DNA

<213> Homo sapiens

<400> 1079

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 120  
 gctcaaactg cttcccaagc cagcagggag gggaaccatg ctgcctgctg acctgggtag  
 180  
 ttctatttag gtcttgtgac acaacagtgg gcaaggtgat gccctctgtg accaaaagta  
 240

ttaccaccaa gttccccag gccctccctt tcgtctgcaa agacacacat ctgtttcact  
 300  
 gtgtcttctg caaagacaca catctgtttc actgggggtt tctgcaaaga caccatttg  
 360  
 tttccctttt taagggtttt cccctccatc ttgtctattt ttaaaaaaat aaaccgggtt  
 420  
 cccaggatag ccttcccccc cagatcaaga gcccatgtga aatgaggggg ccgacttgac  
 480  
 cacagcacct tgttcctttc tgtaatctag acacttctgc acaatagagg gcccacccct  
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 584

<210> 1080

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1080

Met	Leu	His	Val	Val	Ser	Ala	Ser	Gln	Pro	Trp	Glu	Met	Tyr	Pro	His
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Ala	Val	Ala	Ser	Thr	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Cys	Ser	Asn	Cys
			20					25					30		
Phe	Pro	Ser	Gln	Gln	Gly	Gly	Glu	Pro	Cys	Cys	Leu	Leu	Thr	Trp	Val
		35					40					45			
Val	Leu	Phe	Arg	Ser	Cys	Asp	Thr	Thr	Val	Gly	Lys	Val	Met	Pro	Ser
	50					55					60				
Val	Thr	Lys	Ser	Ile	Tyr	Pro	Lys	Phe	Pro	Gln	Ala	Leu	Pro	Phe	Val
65					70					75				80	
Cys	Lys	Asp	Thr	His	Leu	Phe	His	Cys	Val	Phe	Cys	Lys	Asp	Thr	His
				85					90					95	
Leu	Phe	His	Trp	Gly	Phe	Leu	Gln	Arg	His	Pro	Phe	Val	Ser	Pro	Phe
			100					105						110	
Lys	Gly	Phe	Pro	Leu	His	Leu	Val	Tyr	Phe						
		115					120								

<210> 1081

<211> 3077

<212> DNA

<213> Homo sapiens

<400> 1081

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 120  
 tatatccaca atgggaagaa atccagggcc ttaagcccc tatctcctgt ggccatagag  
 180  
 cagacatctc ttaagatgat gcaggcagta ggaggtgcac ctgcacgtcc cactggagaa  
 240  
 tatatctgta atcaatgtgg tgctaagtac acatccctag acagctttca gactcaccta  
 300  
 aaaactcatc tcgacactgt gttccaaaa ttgacctgtc ctcaagtcaa caaggaattc  
 360

cccaaccaag aatccttgct gaagcatgtt accattcact ttatgatcac ttcaacgtat  
420  
tacatctgtg agagttgtga caagcaattc acatcagtgg atgaccttca gaaacacctg  
480  
ctggacatgc acacctttgt cttcttttgc tgcaccctct gccaggaagt ttttgactca  
540  
aaagtctcca ttcagctcca cttggctgtg aagcacagta acgaaaagaa agtctatagg  
600  
tgcacatctt gcaactggga cttccgcaac gaaactgact tgcagctcca tgtgaaacac  
660  
aaccacctgg aaaaccaagg gaaagtgcac aagtgcattt tctgcggtga gtcctttggc  
720  
accgaggtgg agctgcaatg ccacatcacc actcacagta agaagtacaa ctgcaagttc  
780  
tgtagcaaag ctttccatgc gatcattttg ttagaaaaac acttgcgaga aaaacactgt  
840  
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900 agctgcagac tttgctgacc aacagccagg agtcccacaa cagtcacgat 960  
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1020  
gcctacacta tggaaacttt gctgcagaat caccagctcc gagaccacaa catcagacct  
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1140  
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1200  
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cttactgaac acaaagtcac gcatagtaag agtcttgata ctggaaactg ccggatttgc  
1320  
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1740  
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1800  
aaccacatcc aaaccatcca ccgagagctc gtgccagaca gcaacagcac acagttgaaa  
1860  
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1980  
gcaaatcaca tgattgatga aggactgaac catgaatgca aactctgcag ccagaccttt  
2040

gactctcctg ccaaactcca gtgccacctg atagagcaca gcttcgaagg gatgggagge  
 2100  
 accttcaagt gtccagtctg ctttacagta tttgttcaag caaacaagtt gcagcagcat  
 2160  
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 2340  
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 2400  
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 2580  
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 2640  
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 2700  
 ttaaatccaa gactattttt tattgctgaa gattcttgca aaccatgaag agatgttctc  
 2760  
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 3060  
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 3077

&lt;210&gt; 1082

&lt;211&gt; 757

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1082

Xaa	Pro	Val	Val	Glu	Val	Tyr	Ser	Cys	Ser	Tyr	Cys	Thr	Asn	Ser	Pro
1				5					10					15	
Ile	Phe	Asn	Ser	Val	Leu	Lys	Leu	Asn	Lys	His	Ile	Lys	Glu	Asn	His
		20						25					30		
Lys	Asn	Ile	Pro	Leu	Ala	Leu	Asn	Tyr	Ile	His	Asn	Gly	Lys	Lys	Ser
	35					40						45			
Arg	Ala	Leu	Ser	Pro	Leu	Ser	Pro	Val	Ala	Ile	Glu	Gln	Thr	Ser	Leu
	50					55					60				
Lys	Met	Met	Gln	Ala	Val	Gly	Gly	Ala	Pro	Ala	Arg	Pro	Thr	Gly	Glu
65					70					75					80
Tyr	Ile	Cys	Asn	Gln	Cys	Gly	Ala	Lys	Tyr	Thr	Ser	Leu	Asp	Ser	Phe

										85					90					95					
Gln	Thr	His	Leu	Lys	Thr	His	Leu	Asp	Thr	Val	Leu	Pro	Lys	Leu	Thr										
										100					105					110					
Cys	Pro	Gln	Cys	Asn	Lys	Glu	Phe	Pro	Asn	Gln	Glu	Ser	Leu	Leu	Lys										
										115					120					125					
His	Val	Thr	Ile	His	Phe	Met	Ile	Thr	Ser	Thr	Tyr	Tyr	Ile	Cys	Glu										
										130					135					140					
Ser	Cys	Asp	Lys	Gln	Phe	Thr	Ser	Val	Asp	Asp	Leu	Gln	Lys	His	Leu										
										145					150					155					
Leu	Asp	Met	His	Thr	Phe	Val	Phe	Phe	Arg	Cys	Thr	Leu	Cys	Gln	Glu										
										165					170					175					
Val	Phe	Asp	Ser	Lys	Val	Ser	Ile	Gln	Leu	His	Leu	Ala	Val	Lys	His										
										180					185					190					
Ser	Asn	Glu	Lys	Lys	Val	Tyr	Arg	Cys	Thr	Ser	Cys	Asn	Trp	Asp	Phe										
										195					200					205					
Arg	Asn	Glu	Thr	Asp	Leu	Gln	Leu	His	Val	Lys	His	Asn	His	Leu	Glu										
										210					215					220					
Asn	Gln	Gly	Lys	Val	His	Lys	Cys	Ile	Phe	Cys	Gly	Glu	Ser	Phe	Gly										
										225					230					235					
Thr	Glu	Val	Glu	Leu	Gln	Cys	His	Ile	Thr	Thr	His	Ser	Lys	Lys	Tyr										
										245					250					255					
Asn	Cys	Lys	Phe	Cys	Ser	Lys	Ala	Phe	His	Ala	Ile	Ile	Leu	Leu	Glu										
										260					265					270					
Lys	His	Leu	Arg	Glu	Lys	His	Cys	Val	Phe	Glu	Thr	Lys	Thr	Pro	Asn										
										275					280					285					
Cys	Gly	Thr	Asn	Gly	Ala	Ser	Glu	Gln	Val	Gln	Lys	Glu	Glu	Val	Glu										
										290					295					300					
Leu	Gln	Thr	Leu	Leu	Thr	Asn	Ser	Gln	Glu	Ser	His	Asn	Ser	His	Asp										
										305					310					315					
Gly	Ser	Glu	Glu	Asp	Val	Asp	Thr	Ser	Glu	Pro	Met	Tyr	Gly	Cys	Asp										
										325					330					335					
Ile	Cys	Gly	Ala	Ala	Tyr	Thr	Met	Glu	Thr	Leu	Leu	Gln	Asn	His	Gln										
										340					345					350					
Leu	Arg	Asp	His	Asn	Ile	Arg	Pro	Gly	Glu	Ser	Ala	Ile	Val	Lys	Lys										
										355					360					365					
Lys	Ala	Glu	Leu	Ile	Lys	Gly	Asn	Tyr	Lys	Cys	Ser	Val	Cys	Ser	Arg										
										370					375					380					
Thr	Phe	Phe	Ser	Glu	Asn	Gly	Leu	Arg	Glu	His	Met	Gln	Thr	His	Leu										
										385					390					395					
Gly	Pro	Val	Lys	His	Tyr	Met	Cys	Pro	Ile	Cys	Gly	Glu	Arg	Phe	Pro										
										405					410					415					
Ser	Leu	Leu	Thr	Leu	Thr	Glu	His	Lys	Val	Thr	His	Ser	Lys	Ser	Leu										
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Asp	Thr	Gly	Asn	Cys	Arg	Ile	Cys	Lys	Met	Pro	Leu	Gln	Ser	Glu	Glu										
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Glu	Phe	Leu	Glu	His	Cys	Gln	Met	His	Pro	Asp	Leu	Arg	Asn	Ser	Leu										
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Thr	Gly	Phe	Arg	Cys	Val	Val	Cys	Met	Gln	Thr	Val	Thr	Ser	Thr	Leu										
										465					470					475					
Glu	Leu	Lys	Ile	His	Gly	Thr	Phe	His	Met	Gln	Lys	Thr	Gly	Asn	Gly										
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Ser	Ala	Val	Gln	Thr	Thr	Gly	Arg	Gly	Gln	His	Val	Gln	Lys	Leu	Tyr										
										500					505					510					
Lys	Cys	Ala	Ser	Cys	Leu	Lys	Glu	Phe	Arg	Ser	Lys	Gln	Asp	Leu	Val										

515                      520                      525  
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 530                      535                      540  
 Asn Leu Ser Lys Ser Ala Ser Pro Gly Ile Asn Val Pro Pro Gly Thr  
 545                      550                      555                      560  
 Asn Arg Pro Gly Leu Gly Gln Asn Glu Asn Leu Ser Ala Ile Gly Glu  
 565                      570                      575  
 Arg Gln Gly Gly Thr Glu Thr Arg Cys Ser Ser Cys Asn Val Lys  
 580                      585                      590  
 Phe Glu Ser Glu Ser Glu Leu Gln Asn His Ile Gln Thr Ile His Arg  
 595                      600                      605  
 Glu Leu Val Pro Asp Ser Asn Ser Thr Gln Leu Lys Thr Pro Gln Val  
 610                      615                      620  
 Ser Pro Met Pro Arg Ile Ser Pro Ser Gln Ser Asp Glu Lys Lys Thr  
 625                      630                      635                      640  
 Tyr Gln Cys Ile Lys Cys Gln Met Val Phe Tyr Asn Glu Trp Asp Ile  
 645                      650                      655  
 Gln Val His Val Ala Asn His Met Ile Asp Glu Gly Leu Asn His Glu  
 660                      665                      670  
 Cys Lys Leu Cys Ser Gln Thr Phe Asp Ser Pro Ala Lys Leu Gln Cys  
 675                      680                      685  
 His Leu Ile Glu His Ser Phe Glu Gly Met Gly Gly Thr Phe Lys Cys  
 690                      695                      700  
 Pro Val Cys Phe Thr Val Phe Val Gln Ala Asn Lys Leu Gln Gln His  
 705                      710                      715                      720  
 Ile Phe Ser Ala His Gly Gln Glu Asp Lys Ile Tyr Asp Cys Thr Gln  
 725                      730                      735  
 Cys Pro Gln Lys Phe Phe Phe Gln Thr Glu Leu Gln Asn His Thr Met  
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 Thr Gln His Ser Ser  
 755

&lt;210&gt; 1083

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1083

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 120  
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 180  
 tacgagcgac agggcgata caccggcctt cgtaaggctt tgacgatgcc gcctgacgac  
 240  
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 300  
 ggcataagt ggtccttcgt gcctaaggac aatcccaacc cgacctacct cgttgtcaac  
 360  
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 420  
 accctcgtcg agggcgatcat cattgcctcc tacgccatca aggcccaagat ggccttcac  
 480



tacatccgcg gtgaggtgct gcacgtcgtc cgacgc  
516

<210> 1084  
<211> 142  
<212> PRT  
<213> Homo sapiens

<400> 1084  
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Ser Ala Asn Trp Asp Glu Glu Arg Ser Trp Lys Leu Leu Asn Tyr Glu  
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Arg Gln Gly Gly Tyr Thr Gly Leu Arg Lys Ala Leu Thr Met Pro Pro  
35 40 45  
Asp Asp Val Val Ser Leu Val Lys Asp Ala Asn Leu Arg Gly Arg Gly  
50 55 60  
Gly Ala Gly Phe Pro Thr Gly Met Lys Trp Ser Phe Val Pro Lys Asp  
65 70 75 80  
Asn Pro Asn Pro Thr Tyr Leu Val Val Asn Gly Asp Glu Ser Glu Pro  
85 90 95  
Gly Thr Cys Lys Asp Met Pro Leu Met Met Ala Ser Pro His Thr Leu  
100 105 110  
Val Glu Gly Val Ile Ile Ala Ser Tyr Ala Ile Lys Ala Lys Met Ala  
115 120 125  
Phe Ile Tyr Ile Arg Gly Glu Val Leu His Val Val Arg Arg  
130 135 140

<210> 1085  
<211> 374  
<212> DNA  
<213> Homo sapiens

<400> 1085  
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atatccacaa ggttcagctc cgccaggaga ctgtcgccga tcattttcag gaagttttct  
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ttgctgcgtt cgtagtcttg gtgcaggctg aagctgtagt cgcttttgta gatgtcccgg  
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374

<210> 1086  
<211> 110  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1086

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Met Ser Lys Pro Val Ile Leu Glu Ala Met Lys Gly Thr Leu Pro Glu
 20           25           30
Phe Phe Tyr Arg Asp Ile Tyr Lys Ser Asp Tyr Ser Phe Asp Leu His
 35           40           45
Gln Asp Tyr Glu Arg Ser Lys Glu Asn Phe Leu Lys Met Ile Gly Asp
 50           55           60
Ser Leu Leu Ala Glu Leu Asn Leu Val Asp Ile Asp Thr Val Arg Lys
 65           70           75           80
Ile Ala Asn Ser Pro Leu Gly Ser Ser Glu Thr Leu Tyr Asp Phe Glu
 85           90           95
Arg Met Thr His Met Glu Val Trp Leu Arg Glu Asn Tyr Val
 100           105           110

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&lt;210&gt; 1087

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1087

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120
nggcaccact gtgcctggcc catccaccgg agtctagggg tgcaatccac cgcccggtgca
180
tcgttctact tctacaacac tttcccgaa gtggatgcgt tagcgtcggc ggtgcggggcc
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300
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360
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420
ctt
423

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&lt;210&gt; 1088

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1088

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Met Thr Ile Val Ala Pro Pro Pro Pro Thr Ala Gly Ala Ala Ile Ser
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Phe Leu Val Asp Gly Ile His Pro His Asp Leu Gly Gln Val Leu Asp
 20           25           30
Asp His Gly Val Ser Ile Arg Val Xaa His His Cys Ala Trp Pro Ile
 35           40           45
His Arg Ser Leu Gly Val Gln Ser Thr Ala Arg Ala Ser Phe Tyr Phe
 50           55           60
Tyr Asn Thr Phe Pro Glu Val Asp Ala Leu Ala Ser Ala Val Arg Ala

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Lys Leu Ala Trp Glu Asn Thr  
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90

95

<210> 1091  
<211> 438  
<212> DNA  
<213> Homo sapiens

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catggccttg ccgaggcgag tcagcacttt tttggacgac ctttaaaaga acttaatatc  
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gacgagtttg ccttgtagt aggaatggtg aaagggcctt ctatttataa tcctgaacga  
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caccctaaac gtgctttatc acgcagaaat acggtattag caattttaaa aagccaagat  
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cgtttaaccg agtcggatta taatatttta cggaaacaac ccattcgctt ggcagataaa  
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<210> 1092  
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<212> PRT  
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<400> 1092  
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Ala Gln Val Gly Asn Glu Gly Leu His Gly Phe Ala Glu Ala Ser Gln  
35 40 45  
His Phe Phe Gly Arg Pro Leu Lys Glu Leu Asn Ile Asp Glu Phe Ala  
50 55 60  
Leu Leu Val Gly Met Val Lys Gly Pro Ser Ile Tyr Asn Pro Glu Arg  
65 70 75 80  
His Pro Lys Arg Ala Leu Ser Arg Arg Asn Thr Val Leu Ala Ile Leu  
85 90 95  
Lys Ser Gln Asp Arg Leu Thr Glu Ser Asp Tyr Asn Ile Leu Arg Lys  
100 105 110  
Gln Pro Ile Arg Leu Ala Asp Lys His Gln Glu Arg Ser Val Tyr Gly  
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Asp Tyr Leu Asp Leu Val Ser Met Gln Leu Ser Arg Asp Phe Asp Arg  
130 135 140  
Cys Met  
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<210> 1093  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

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 gatgcccgc tgggtgccga agctgtccgt gaactgctgc acgctatcga cctggaacac  
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 240  
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 351

<210> 1094  
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<400> 1094  
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 Leu Glu Glu Phe Gly Asp Asp Phe Asp Ala Arg Met Gly Ala Glu Ala  
 35 40 45  
 Val Arg Glu Leu Leu His Ala Ile Asp Leu Glu His Glu Ile Gly Arg  
 50 55 60  
 Leu Arg Glu Gln Ile Pro Gln Thr Asn Ser Glu Thr Lys Ile Lys Lys  
 65 70 75 80  
 Leu Ser Lys Arg Leu Lys Leu Met Glu Ala Phe Gln Gly Ser Gly Asn  
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 100 105 110  
 Leu Arg Pro Leu Val  
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<210> 1095  
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 <212> DNA  
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 aagaatgagg ccatcacatg ccgccagcgg gtgcttcggg cctcagcctc gttgctgtcc  
 360  
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 420  
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 480  
 cacggcacgt gtggggaggt gtctcatggc agctgctcca gcggatatcc cgtttcctcc  
 540  
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 600  
 ttttacttgt gaacctaag  
 619

&lt;210&gt; 1096

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1096

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			20					25					30		
Gln	Leu	Arg	Gln	Gly	Ser	Ala	Gln	Ser	Gln	Arg	Gln	Ile	Arg	Gly	Glu
		35					40					45			
Ile	Asp	Ser	Leu	Arg	Gln	Glu	Lys	Asp	Ser	Leu	Leu	Lys	Gln	Arg	Leu
	50					55					60				
Glu	Ile	Asp	Gly	Lys	Leu	Arg	Gln	Gly	Ser	Leu	Leu	Ser	Pro	Glu	Glu
65					70					75				80	
Glu	Arg	Thr	Leu	Phe	Gln	Leu	Asp	Glu	Ala	Ile	Glu	Ala	Leu	Asp	Ala
			85						90					95	
Ala	Ile	Glu	Tyr	Lys	Asn	Glu	Ala	Ile	Thr	Cys	Arg	Gln	Arg	Val	Leu
		100					105						110		
Arg	Ala	Ser	Ala	Ser	Leu	Leu	Ser	Gln	Cys	Glu	Met	Asn	Leu	Met	Ala
	115						120					125			
Lys	Leu	Ser	Tyr	Leu	Ser	Ser	Ser	Glu	Thr	Arg	Ala	Leu	Leu	Cys	Lys
	130					135					140				
Tyr	Phe	Asp	Lys	Val	Gly	Gln	Gln	Pro	Met	Ala	Pro	Pro	Ala	Pro	Pro
145					150					155				160	
His	Gly	Thr	Cys	Gly	Glu	Val	Ser	His	Gly	Ser	Cys	Ser	Ser	Gly	Tyr
			165						170					175	
Pro	Val	Ser	Ser	Gln	Thr	Gly	Gly	Gln	Asn	Gln	Asp	Gln	Leu	Ile	Cys
		180						185					190		
Arg	Ala	Ala													
		195													

&lt;210&gt; 1097

&lt;211&gt; 5108

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 1098  
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<400> 1098  
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 Ser Ser Glu Glu Ala Arg Lys Leu Met Val Arg Leu Thr Arg His Thr  
 35 40 45  
 Gly Arg Lys Gln Pro Pro Val Ser Glu Ser His Trp Arg Thr Leu Leu  
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 Gln Asp Met Leu Thr Met Gln Gln Asn Val Tyr Thr Cys Leu Asp Ser  
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 Asp Ala Cys Tyr Glu Ile Phe Thr Glu Ser Leu Leu Cys Ser Ser Arg  
 85 90 95  
 Leu Glu Asn Ile His Leu Ala Gly Gln Met Met His Cys Ser Ala Cys  
 100 105 110  
 Ser Glu Asn Pro Pro Ala Gly Ile Ala His Lys Gly Lys Pro His Tyr  
 115 120 125  
 Arg Val Ser Tyr Glu Lys Ser Ile Asp Leu Val Leu Ala Ala Ser Arg  
 130 135 140  
 Glu Tyr Phe Asn Ser Ser Thr Asn Leu Thr Asp Ser Cys Met Asp Leu  
 145 150 155 160  
 Ala Arg Cys Cys Leu Gln Leu Ile Thr Asp Arg Pro Pro Ala Ile Gln  
 165 170 175  
 Glu Glu Leu Asp Leu Ile Gln Ala Val Gly Cys Leu Glu Glu Phe Gly  
 180 185 190  
 Val Lys Ile Leu Pro Leu Gln Val Arg Leu Cys Pro Asp Arg Ile Ser  
 195 200 205  
 Leu Ile Lys Glu Cys Ile Ser Gln Ser Pro Thr Cys Tyr Lys Gln Ser  
 210 215 220  
 Thr Lys Leu Leu Gly Leu Ala Glu Leu Leu Arg Val Ala Gly Glu Asn  
 225 230 235 240  
 Pro Glu Glu Arg Arg Gly Gln Val Leu Ile Leu Leu Val Glu Gln Ala  
 245 250 255  
 Leu Arg Phe His Asp Tyr Lys Ala Ala Ser Met His Cys Gln Glu Leu  
 260 265 270  
 Met Ala Thr Gly Tyr Pro Lys Ser Trp Asp Val Cys Ser Gln Leu Gly

1029

705                      710                      715                      720  
 His Glu Arg Leu Gln Tyr Tyr Phe Thr Leu Leu Glu Asn Cys Gly Cys  
                                  725                      730                      735  
 Ala Asp Leu Gly Asn Cys Ala Ile Lys Pro Glu Thr His Ile Arg Leu  
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 Leu Lys Lys Phe Lys Val Val Ala Ser Gly Leu Asn Tyr Lys Lys Leu  
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 Thr Asp Glu Asn Met Ser Pro Leu Glu Ala Leu Glu Pro Val Leu Ser  
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 Ser Gln Asn Ile Leu Ser Ile Ser Lys Leu Val Pro Lys Ile Pro Glu  
 785                                   790                                   795                                   800  
 Lys Asp Gly Gln Met Leu Ser Pro Ser Ser Leu Tyr Thr Ile Trp Leu  
                                  805                                   810                                   815  
 Gln Lys Leu Phe Trp Thr Gly Asp Pro His Leu Ile Lys Gln Val Pro  
                                  820                                   825                                   830  
 Gly Ser Ser Pro Glu Trp Leu His Ala Tyr Asp Val Cys Met Lys Tyr  
                                  835                                   840                                   845  
 Phe Asp Arg Leu His Pro Gly Asp Leu Ile Thr Val Val Asp Ala Val  
                                  850                                   855                                   860  
 Thr Phe Ser Pro Lys Ala Val Thr Lys Leu Ser Val Glu Ala Arg Lys  
 865                                   870                                   875                                   880  
 Glu Met Thr Arg Lys Ala Ile Lys Thr Val Lys His Phe Ile Glu Lys  
                                  885                                   890                                   895  
 Pro Arg Lys Arg Asn Ser Glu Asp Glu Ala Gln Glu Ala Lys Asp Ser  
                                  900                                   905                                   910  
 Lys Val Thr Tyr Ala Asp Thr Leu Asn His Leu Glu Lys Ser Leu Ala  
                                  915                                   920                                   925  
 His Leu Glu Thr Leu Ser His Ser Phe Ile Leu Ser Leu Lys Asn Ser  
                                  930                                   935                                   940  
 Glu Gln Glu Thr Leu Gln Lys Tyr Ser His Leu Tyr Asp Leu Ser Arg  
 945                                   950                                   955                                   960  
 Ser Glu Lys Glu Lys Leu His Asp Glu Ala Val Ala Ile Cys Leu Asp  
                                  965                                   970                                   975  
 Gly Gln Pro Leu Ala Met Ile Gln Gln Leu Leu Glu Val Ala Val Gly  
                                  980                                   985                                   990  
 Pro Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala Ile Met Lys  
                                  995                                   1000                                   1005  
 Ile Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly Gly Pro Arg  
                                  1010                                   1015                                   1020  
 Asp Pro Leu Lys Val Leu Glu Gly Val Val Ala Val His Thr Ser  
 1025                                   1030                                   1035                                   1040  
 Val Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp  
                                  1045                                   1050                                   1055  
 Leu Arg Pro Phe Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile  
                                  1060                                   1065                                   1070  
 His Val Leu Gln Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp  
                                  1075                                   1080                                   1085  
 Ser Lys Leu Leu Val Phe Phe Arg Thr Glu Ala Ile Leu Lys Ala Ser  
                                  1090                                   1095                                   1100  
 Trp Pro Gln Arg Gln Val Asp Ile Ala Asp Ile Glu Asn Glu Glu Asn  
 1105                                   1110                                   1115                                   1120  
 Arg Tyr Cys Leu Phe Met Glu Leu Leu Glu Ser Ser His His Glu Ala  
                                  1125                                   1130                                   1135  
 Glu Phe Gln His Leu Val Leu Leu Leu Gln Ala Trp Pro Pro Met Lys

	1140		1145		1150
Ser	Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val				
	1155		1160		1165
Met	Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu				
	1170		1175		1180
Val	Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro				
1185		1190		1195	1200
Ala	Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu				
	1205		1210		1215
Leu	Leu Pro Ser Leu Lys Leu Leu Leu Glu Ser Arg Asp Glu His Leu				
	1220		1225		1230
His	Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp				
	1235		1240		1245
Ser	Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu				
	1250		1255		1260
Leu	Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His				
1265		1270		1275	1280
Leu	Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly				
	1285		1290		1295
Arg	His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu				
	1300		1305		1310
Leu	Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala				
	1315		1320		1325
Leu	Arg Ala Ala Gln His Trp Val				
	1330		1335		

&lt;210&gt; 1099

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1099

acgcgtgctc tctcccgctt ggcaatcagc atggcctttt cgagctcggc ggtgcgcaat  
60tgaaccattt cttccagttg cgattttttca gaaagcagcg tcgattgacc ttcggtcagc  
120ttgcgcacat agcgcttggt gcggtctggca aggatatagg cgagtatcaa tgcacctgcg  
180agggcgagga tcgaggcaat ggtcagccag aagcgcaact tgtccatggc tatgttgagg  
240gcgattagcc gacgatcttc ttcacccagg aaactgttga tggttttcct gacgtcatcc  
300

atctggcca

309

&lt;210&gt; 1100

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1100

Met	Asp	Asp	Val	Arg	Lys	Thr	Ile	Asn	Ser	Phe	Leu	Gly	Glu	Glu	Asp
1					5				10				15		
Arg	Arg	Leu	Ile	Ala	Arg	Asn	Ile	Ala	Met	Asp	Lys	Leu	Arg	Phe	Trp

```

      20      25      30
Leu Thr Ile Ala Ser Ile Leu Ala Leu Ala Gly Ala Leu Ile Leu Ala
      35      40      45
Tyr Ile Leu Ala Ser Arg Thr Lys Arg Tyr Val Arg Lys Leu Thr Glu
      50      55      60
Gly Gln Ser Thr Leu Leu Ser Glu Lys Ser Gln Leu Glu Glu Met Val
      65      70      75      80
Gln Leu Arg Thr Ala Glu Leu Glu Lys Ala Met Leu Ile Ala Lys Arg
      85      90      95
Glu Arg Ala Arg
      100

```

<210> 1101  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1101
gtcgacgtta ccaactacgt catgttggag tctgggtcagc cgcttcatgc ctatgatgcc
60
gacaacgtca gcgggacgat tgtggtccgt aaggccacg agggtgagca tctattgacc
120
ctcgacgaca ccgatcgcac cctcgatcct gacgatctag tcatcgccga cgactcggga
180
gccattggcc tggctggcgt catgggtggt gcggccaccg aagtgactgc tgagacgacg
240
tcaatcatcc tcgagggcgc tcacttcgac ccgatgacgg gcgctcgtgc ttaccgacgc
300
cacaagctcg gttcggaggc ctcccgcgcg tttgagcggg gcgttgatcc gatttgcgcc
360
cataccgcag ccgttcgcgc agcgggaattg ctcgcccagt acggcggtgc caccgtcggt
420
gagcccaccg tcgttgggtga ggtccccgag atgccacgtc aaacgatcaa cgctgattta
480
cctaaccgga ttctcggcac gaagggtgcca actgaagagg tcatcgagat cttgacgcgt
540

```

<210> 1102  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1102
Val Asp Val Thr Asn Tyr Val Met Leu Glu Ser Gly Gln Pro Leu His
1      5      10      15
Ala Tyr Asp Ala Asp Asn Val Ser Gly Thr Ile Val Val Arg Lys Ala
20      25      30
His Glu Gly Glu His Leu Leu Thr Leu Asp Asp Thr Asp Arg Thr Leu
35      40      45
Asp Pro Asp Asp Leu Val Ile Ala Asp Asp Ser Gly Ala Ile Gly Leu
50      55      60
Ala Gly Val Met Gly Gly Ala Ala Thr Glu Val Thr Ala Glu Thr Thr
65      70      75      80
Ser Ile Ile Leu Glu Gly Ala His Phe Asp Pro Met Thr Gly Ala Arg

```

```

      85              90              95
Ala Tyr Arg Arg His Lys Leu Gly Ser Glu Ala Ser Arg Arg Phe Glu
      100              105              110
Arg Gly Val Asp Pro Ile Cys Ala His Thr Ala Ala Val Arg Ala Ala
      115              120              125
Glu Leu Leu Ala Gln Tyr Gly Gly Ala Thr Val Gly Glu Pro Thr Val
      130              135              140
Val Gly Glu Val Pro Glu Met Pro Arg Gln Thr Ile Asn Ala Asp Leu
      145              150              155              160
Pro Asn Arg Ile Leu Gly Thr Lys Val Pro Thr Glu Glu Val Ile Glu
      165              170              175
Ile Leu Thr Arg
      180

```

<210> 1103  
 <211> 537  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1103
cctttcctcc aaccaggcgc tgcggcgccg gcacttgccc gacgttataa aacaattcaa
60
cgtcagggttt accatcgctg tactcaacca aatggtagcc gtatccacct tccccaccga
120
tcgcgaccca ggtgatcttt ccctcggcac agattgacgt ggcattctcg tcggagtga
180
tcaagcagcg cttaggcagc tgctgggccc gcggcttcgc ctagctcgcc ggagcacacg
240
aacccttccc gaagataacc gccaaaggcct ggcacacctt ctgctgcacc cattccggct
300
tgacgccgac cgccaccgca ctggtgaaca tagccgcaat aaggagaatt gcgatgtatt
360
ccggcgcgcc ggcaccccgga tcgtcccttg tccgcatggg tctccctcc actacctacc
420
caatacaggg gagagcataa aaagaaaccc atagccgcac ctgagcccat ggccccaaac
480
cgggggccaa gccgggcccc aaccatggga tcaaccggat gtccgtacat cacgcgt
537

```

<210> 1104  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1104
Met Tyr Gly His Pro Val Asp Pro Met Val Trp Ala Arg Leu Gly Pro
1      5      10      15
Arg Phe Gly Ala Met Gly Ser Gly Ala Ala Met Gly Phe Phe Leu Cys
      20      25      30
Ser Pro Leu Tyr Trp Val Gly Ser Gly Gly Glu Thr His Ala Asp Lys
      35      40      45
Gly Arg Ser Gly Cys Arg Arg Ala Gly Ile His Arg Asn Ser Pro Tyr
      50      55      60
Cys Gly Tyr Val His Gln Cys Gly Gly Gly Arg Arg Gln Ala Gly Met

```

```

65              70              75              80
Gly Ala Ala Glu Gly Val Pro Gly Leu Gly Gly Tyr Leu Arg Glu Gly
              85              90              95
Phe Val Cys Ser Gly Glu Leu Gly Glu Ala Ala Gly Pro Ala Ala Ala
              100              105              110

```

<210> 1105  
 <211> 448  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1105
agggacctgg ggcagcacgt gcacgtgggt gggaggctcc ttgctaccga cagccagcca
60
tgggggtgggc ccttccgagg ctgcctccag gacctggagac tcgatggctg ccacctcccc
120
ttctttcctc tgccactgga taactcaagc cagcccagcg agctcggcgg caggcagtcc
180
tggaacctca ctgcgggctg cgtctccgag gacatgtgca gtctgacccc ctgtttcaat
240
ggtggggactt gcctcgtcac ctggaatgac ttccactgta cctgccctgc caatttcacg
300
gggcctacat gtgccagca gctgtggtgt cccggccagc cctgtctccc acctgccagc
360
tgtgaggagg tccctgatgg ctttgtgtgt gtggcggagg ccacgttccg cgagggtccc
420
cccgccgcgt tcagcgggca caacgcgt
448

```

<210> 1106  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1106
Arg Asp Leu Gly Gln His Val His Val Gly Gly Arg Leu Leu Ala Thr
1              5              10              15
Asp Ser Gln Pro Trp Gly Gly Pro Phe Arg Gly Cys Leu Gln Asp Leu
20              25              30
Arg Leu Asp Gly Cys His Leu Pro Phe Phe Pro Leu Pro Leu Asp Asn
35              40              45
Ser Ser Gln Pro Ser Glu Leu Gly Gly Arg Gln Ser Trp Asn Leu Thr
50              55              60
Ala Gly Cys Val Ser Glu Asp Met Cys Ser Pro Asp Pro Cys Phe Asn
65              70              75              80
Gly Gly Thr Cys Leu Val Thr Trp Asn Asp Phe His Cys Thr Cys Pro
85              90              95
Ala Asn Phe Thr Gly Pro Thr Cys Ala Gln Gln Leu Trp Cys Pro Gly
100              105              110
Gln Pro Cys Leu Pro Pro Ala Thr Cys Glu Glu Val Pro Asp Gly Phe
115              120              125
Val Cys Val Ala Glu Ala Thr Phe Arg Glu Gly Pro Pro Ala Ala Phe
130              135              140
Ser Gly His Asn Ala

```



145

&lt;210&gt; 1107

&lt;211&gt; 618

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1107

acgcgttgat gaagtacctg ccacgcttca gcaatgacgg ctcggtgaac ggctttctata  
 60  
 tctttgttat cgatgagacc gaacgcaaac tcaccgaaga ggccctgcgc cacctcaacg  
 120  
 agaacctcga agagcgcgct gccagcgca cacaggcgct ggctgaagcc aaccaacgcc  
 180  
 tggcaaaaca aaatgttcaa acgcaagcgc gccgaagacg cgctgcgtca cgcgcagaaa  
 240  
 atggaagccg ggggccagct caccggcggc atcgcccatg atttcaacaa catgctgacc  
 300  
 gggattatcg gcagcctgga cttgatgcag cgctacatcn aggcggggcg cagcgacgaa  
 360  
 atcggccgnc ttactgacgc cgccgtatcg tccgcccacg gcgcggcgcg cctcaccat  
 420  
 cggctgctgg cgttctcgcg ccgccagtcg ctggccccc gcccgctgga cccaaccag  
 480  
 ctggtagcgt ccctggagga tctgttccag cgaaccaaag gcgcgcatat cacgctcaaa  
 540  
 gtgcaactgg gccgcgatat ctggcccgtg aataccgatg ccagccagtt ggaaaacgcc  
 600  
 ctgctcaacc tggcgatc  
 618

&lt;210&gt; 1108

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1108

Met	Arg	Pro	Asn	Ala	Asn	Ser	Pro	Lys	Arg	Pro	Cys	Ala	Thr	Ser	Thr
1				5					10					15	
Arg	Thr	Ser	Lys	Ser	Ala	Ser	Pro	Ser	Ala	His	Arg	Arg	Trp	Leu	Lys
			20					25					30		
Pro	Thr	Asn	Ala	Trp	Gln	Asn	Lys	Met	Phe	Lys	Arg	Lys	Arg	Ala	Glu
		35					40					45			
Asp	Ala	Leu	Arg	His	Ala	Gln	Lys	Met	Glu	Ala	Gly	Gly	Gln	Leu	Thr
	50					55					60				
Gly	Gly	Ile	Ala	His	Asp	Phe	Asn	Asn	Met	Leu	Thr	Gly	Ile	Ile	Gly
65					70					75				80	
Ser	Leu	Asp	Leu	Met	Gln	Arg	Tyr	Ile	Xaa	Ala	Gly	Arg	Ser	Asp	Glu
			85						90				95		
Ile	Gly	Arg	Leu	Thr	Asp	Ala	Ala	Val	Ser	Ser	Ala	His	Arg	Ala	Ala
			100					105					110		
Ala	Leu	Thr	His	Arg	Leu	Leu	Ala	Phe	Ser	Arg	Arg	Gln	Ser	Leu	Ala
		115					120					125			
Pro	Arg	Pro	Leu	Asp	Pro	Asn	Gln	Leu	Val	Ala	Ser	Leu	Glu	Asp	Leu

130		135		140
Phe Gln Arg Thr Lys Gly Ala His Ile Thr Leu Lys Val Gln Leu Gly				
145		150		155
Arg Asp Ile Trp Pro Val Asn Thr Asp Ala Ser Gln Leu Glu Asn Ala				160
	165		170	175
Leu Leu Asn Leu Ala Ile				
	180			

<210> 1109  
 <211> 325  
 <212> DNA  
 <213> Homo sapiens

<400> 1109  
 accggtgagc atcagggagg caccatgcag acgactctcc catccagtct caagccgtcc  
 60  
 agcctcaaga tcgtcgcacc gctggggggc atcctcgtgc ccttgatca ggtgcccgat  
 120  
 cccgttttcg cccagaagat ggtgggagac gggatctccc tggaccccat ctcaaacgaa  
 180  
 ttgctggcgc cggtcgccgg caccgtgacc cagctccaca acgcccacca cgcgctcacg  
 240  
 atcacgaccc cggaaggcat cgaggttctg gtccatatcg gactggatac cgtgatgctg  
 300  
 cgcgggcgaca gctatccccc ccccn  
 325

<210> 1110  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 1110	
Thr Gly Glu His Gln Gly Gly Thr Met Gln Thr Thr Leu Pro Ser Ser	
1	5
Leu Lys Pro Ser Ser Leu Lys Ile Val Ala Pro Leu Gly Gly Ile Leu	10
	15
	20
Val Pro Leu Asp Gln Val Pro Asp Pro Val Phe Ala Gln Lys Met Val	25
	30
	35
Gly Asp Gly Ile Ser Leu Asp Pro Ile Ser Asn Glu Leu Leu Ala Pro	40
	45
	50
Val Ala Gly Thr Val Thr Gln Leu His Asn Ala His His Ala Leu Thr	55
	60
65	70
Ile Thr Thr Pro Glu Gly Ile Glu Val Leu Val His Ile Gly Leu Asp	75
	80
	85
	90
Thr Val Met Leu Arg Gly Asp Ser Tyr Pro Pro Pro	95
	100
	105

<210> 1111  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 1111

nnacgcgctcg ccccggtgctg cctggcagtg ggagaagagc atgaccttac cgagctcgcg  
 60  
 actgaactcg tcaacgccgc ctatagccgg gttgacatgg tggaacgccg tggcgaattc  
 120  
 gcagtacgtg gcggcatcgt cgacgtcttc ccaccggtgc tagaacaccc ggtccgtatc  
 180  
 gatttttttg gtgacgagat cgaggaaatg acctccttcg cggtagccga ccagcgatcc  
 240  
 accgacgaga ctcaccaaga actgatctgc gctccttgcc gtgagctcat cctcaccgac  
 300  
 gaggtacgtt cccgagccaa ggctttgctg accgaccatc ccgaattagc tgacatgttg  
 360  
 gagcggatcg gcaacggtca agctt  
 385

<210> 1112  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1112  
 Xaa Arg Val Ala Pro Val Arg Leu Ala Val Gly Glu Glu His Asp Leu  
 1 5 10 15  
 Thr Glu Leu Ala Thr Glu Leu Val Asn Ala Ala Tyr Ser Arg Val Asp  
 20 25 30  
 Met Val Glu Arg Arg Gly Glu Phe Ala Val Arg Gly Gly Ile Val Asp  
 35 40 45  
 Val Phe Pro Pro Val Leu Glu His Pro Val Arg Ile Asp Phe Phe Gly  
 50 55 60  
 Asp Glu Ile Glu Glu Met Thr Ser Phe Ala Val Ala Asp Gln Arg Ser  
 65 70 75 80  
 Thr Asp Glu Thr His Gln Glu Leu Ile Cys Ala Pro Cys Arg Glu Leu  
 85 90 95  
 Ile Leu Thr Asp Glu Val Arg Ser Arg Ala Lys Ala Leu Leu Thr Asp  
 100 105 110  
 His Pro Glu Leu Ala Asp Met Leu Glu Arg Ile Gly Asn Gly Gln Ala  
 115 120 125

<210> 1113  
 <211> 400  
 <212> DNA  
 <213> Homo sapiens

<400> 1113  
 nnncgaccga tgagcgatcg cgaaccgctc aacctgggat acccctacgt cgagtctttc  
 60  
 cactcggact tctcggggac cggcggagtc gatcagaccg accgttctac caatatcgac  
 120  
 gagcacacca tcgaggagat gcatcagatc gcctcgcgtt accccgactc ccgttcggcg  
 180  
 ttgctgccga tectgcacct ggttcagtcg gtggacggac gcatctcgcc ggtcggatt  
 240  
 gagactgcgg ctgaagtgct cggcattacc accgcccagg tatccgggggt ggcgaccttc  
 300

tacaccatgt ataagaagca ccttgcgggc cagcatcaca tcggtgtctg caccacggcg  
 360  
 ctgtgcgccg tcatgggtgg cgaggaggtg cttgcccgtn  
 400

<210> 1114  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1114  
 Xaa Arg Pro Met Ser Asp Arg Glu Pro Val Asn Leu Gly Tyr Pro Tyr  
 1 5 10 15  
 Val Glu Ser Phe His Ser Asp Phe Ser Gly Thr Gly Gly Val Asp Gln  
 20 25 30  
 Thr Asp Arg Ser Thr Asn Ile Asp Glu His Thr Ile Glu Glu Met His  
 35 40 45  
 Gln Ile Ala Ser Arg Tyr Pro Asp Ser Arg Ser Ala Leu Leu Pro Ile  
 50 55 60  
 Leu His Leu Val Gln Ser Val Asp Gly Arg Ile Ser Pro Val Gly Ile  
 65 70 75 80  
 Glu Thr Ala Ala Glu Val Leu Gly Ile Thr Thr Ala Gln Val Ser Gly  
 85 90 95  
 Val Ala Thr Phe Tyr Thr Met Tyr Lys Lys His Pro Ala Gly Gln His  
 100 105 110  
 His Ile Gly Val Cys Thr Thr Ala Leu Cys Ala Val Met Gly Gly Glu  
 115 120 125  
 Glu Val Leu Ala Arg  
 130

<210> 1115  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 1115  
 tctccgactg cacagattag agaaaggact gcgatgacca ttgcgaccac tcatgttggt  
 60  
 tccctgcccc gcacccccga gctgatcgag gcgaatcgtg cgcgccgtga gggttcgctc  
 120  
 ggcgaggctg acttcacgtc gctgctgcag gatcagggtg acggcggttg gaagcgtcag  
 180  
 gctgagattg gcctggatat cgtcaatgac ggcgagtacg gtcacgcgat gcttgacacg  
 240  
 gttgattacg gcgcgtgggtg gacgtattcc atctctcgtt tcggcgggct gtcctttgag  
 300  
 gacgtgcagc gttttgatgt gcgtcccccg gctggccgtg acggtcgcct gtctttctcg  
 360  
 tcgttcgctg agcgccgcga ctggcagcgt ttccggacgc gt  
 402

<210> 1116  
 <211> 134  
 <212> PRT

<213> Homo sapiens

<400> 1116

```

Ser Pro Thr Ala Gln Ile Arg Glu Arg Thr Ala Met Thr Ile Arg Thr
 1           5           10           15
Thr His Val Gly Ser Leu Pro Arg Thr Pro Glu Leu Ile Glu Ala Asn
      20           25           30
Arg Ala Arg Arg Glu Gly Ser Leu Gly Glu Ala Asp Phe Thr Ser Leu
      35           40           45
Leu Gln Asp Gln Val Asp Gly Val Val Lys Arg Gln Ala Glu Ile Gly
      50           55           60
Leu Asp Ile Val Asn Asp Gly Glu Tyr Gly His Ala Met Leu Asp Thr
      65           70           75           80
Val Asp Tyr Gly Ala Trp Trp Thr Tyr Ser Ile Ser Arg Phe Gly Gly
      85           90           95
Leu Ser Phe Glu Asp Val Gln Arg Phe Asp Val Arg Pro Pro Ala Gly
      100          105          110
Arg Asp Gly Arg Leu Ser Phe Ser Ser Phe Ala Glu Arg Arg Asp Trp
      115          120          125
Gln Arg Phe Arg Thr Arg
      130

```

<210> 1117

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1117

```

ggcgccgggtc ttgccctggc tggaagtggc atgcagacct tgggtgcggaa cccgctggct
60
gaccctacc tgctaggtgt atcggtggc gcaagtgtgg gagcaaccgc agtcacgct
120
ttggggatgt tcacttcgtg gggaactcac cgactcactc ttggtgccct tgtagggggcc
180
ttggcggcag ctgcattggt ctatctcatt tccatggcgc aaggaggcat gacgccgctt
240
cggttggtgc tgcgggcgt ggtgttgctc tcggcgcttc cgcgttggcg agtttcctcg
300
tccttcg
307

```

<210> 1118

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1118

```

Gly Ala Gly Leu Ala Leu Ala Gly Ser Gly Met Gln Thr Leu Val Arg
 1           5           10           15
Asn Pro Leu Ala Asp Pro Tyr Leu Leu Gly Val Ser Ala Gly Ala Ser
      20           25           30
Val Gly Ala Thr Ala Val Ile Ala Leu Gly Met Phe Thr Ser Trp Gly
      35           40           45
Thr His Arg Leu Thr Leu Gly Ala Leu Val Gly Ala Leu Ala Ala Ala

```

```

      50              55              60
Ala Leu Val Tyr Leu Ile Ser Met Ala Gln Gly Gly Met Thr Pro Leu
65              70              75              80
Arg Leu Val Leu Ser Gly Val Val Leu Ser Ser Ala Phe Ser Arg Trp
      85              90              95
Arg Val Ser Ser Ser Phe
      100

```

<210> 1119  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1119
cgcgtccttg agatgcttga gcaggctcgg attgaggatc cagccagggt gatggattcc
60
tatccgcata aactgtccgg tggccagcgt caacgggttc tgcttgccat ggcgttggtg
120
aactcgccgg atctgctcat ttgtgacgag ccgacgaccg ccttgagcgt cacgggtgcag
180
tctcaggtac tggcgactat cgatgaggtg cttgactcgg ttggtgccgc atgcctattt
240
attaccacag atttggcggg tgtctcgcac atctgccggg agcttatcgt gatgacgtcg
300
ggcaagggtc ttgaagccgg atcagcgcgt gatgtgttat ctcaccctga tca
353

```

<210> 1120  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1120
Arg Val Leu Glu Met Leu Glu Gln Val Gly Ile Glu Asp Pro Ala Arg
1              5              10              15
Val Met Asp Ser Tyr Pro His Gln Leu Ser Gly Gly Gln Arg Gln Arg
      20              25              30
Val Leu Leu Ala Met Ala Leu Val Asn Ser Pro Asp Leu Leu Ile Cys
      35              40              45
Asp Glu Pro Thr Thr Ala Leu Asp Val Thr Val Gln Ser Gln Val Leu
50              55              60
Ala Thr Ile Asp Glu Val Leu Asp Ser Val Gly Ala Ala Cys Leu Phe
65              70              75              80
Ile Thr His Asp Leu Ala Val Val Ser His Ile Cys Arg Glu Leu Ile
      85              90              95
Val Met Thr Ser Gly Lys Val Val Glu Ala Gly Ser Ala Arg Asp Val
      100              105              110
Leu Ser His Pro Asp
      115

```

<210> 1121  
 <211> 406  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1121

tgatcaccca tgctccactc gaccgcgcgc tcgacgatgc gacggctgag acgatgctcg  
60  
cccagggcac ggtgttcac cgcacctga cgatgatgaa aggcgtcgcc gcgaatctca  
120  
ccgcagcggg cgttcccggg gtgagctatg cacacgcca cgagagcacg cgcgcgatgc  
180  
atgccgcggg cgttccgggc ctggccggca ccgacgccta catcgggtcc ttcacacggg  
240  
catcgccgcc atacggcgag agcatgcacg acgaagacgc ctacatcggg ctctcgaac  
300  
gggcaatgcc gccatacggc gagagcatgc acgacgaact cgctctgctc gtggacgccg  
360  
gcctgtcaac agccgaagcg ctgcgcgctg ccacctcgac gggcgc  
406

&lt;210&gt; 1122

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1122

Met	Leu	Ala	Gln	Gly	Thr	Val	Phe	Ile	Pro	Thr	Leu	Thr	Met	Met	Lys
1				5					10				15		
Gly	Val	Ala	Ala	Asn	Leu	Thr	Ala	Ala	Gly	Val	Pro	Gly	Val	Ser	Tyr
			20					25				30			
Ala	His	Ala	His	Glu	Ser	Thr	Arg	Ala	Met	His	Ala	Ala	Gly	Val	Pro
		35					40				45				
Val	Leu	Ala	Gly	Thr	Asp	Ala	Tyr	Ile	Gly	Ser	Phe	Thr	Arg	Ala	Ser
	50				55					60					
Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Asp	Ala	Tyr	Ile	Gly	Leu
65					70				75					80	
Leu	Glu	Arg	Ala	Met	Pro	Pro	Tyr	Gly	Glu	Ser	Met	His	Asp	Glu	Leu
			85					90					95		
Ala	Leu	Leu	Val	Asp	Ala	Gly	Leu	Ser	Thr	Ala	Glu	Ala	Leu	Arg	Ala
			100				105						110		
Ala	Thr	Ser	Thr	Gly											
			115												

&lt;210&gt; 1123

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1123

gccggcgatg cgttcattaa ggcctaagat gcgcgcacgc ctccccgctt tctcgcctt  
60  
cgctccacc gcccttgccg cagcggggat ggtgggggtgc tcgtccgagg gggcatcgcc  
120  
aagcgaatgc tcccctgttg atattgccgc agtgcgcgag gccctgccgc attcgctcgc  
180  
taaggcgaag ctgcaccgc actccaccaa cgaggatgaa cactcctttt ccatgctcta  
240

ccgcgcgcaa gataaggagc aggtcagctt gctggggacg aagtatgagg ccgacggtgc  
300

accggtctgc cccgatgacc ccaatgaggc agcgcgc  
337

<210> 1124

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1124

Met	Arg	Ser	Leu	Arg	Pro	Lys	Met	Arg	Arg	Arg	Leu	Pro	Ala	Phe	Leu
1				5				10						15	
Ala	Leu	Ala	Ser	Thr	Ala	Leu	Ala	Ala	Ala	Gly	Met	Val	Gly	Cys	Ser
			20					25					30		
Ser	Glu	Gly	Ala	Ser	Pro	Ser	Glu	Cys	Ser	Pro	Val	Asp	Ile	Ala	Ala
		35					40					45			
Val	Arg	Glu	Ala	Leu	Pro	His	Ser	Leu	Ala	Lys	Ala	Lys	Leu	Asp	Pro
	50					55				60					
His	Ser	Thr	Asn	Glu	Asp	Glu	His	Ser	Phe	Ser	Met	Leu	Tyr	Arg	Ala
65				70					75					80	
Gln	Asp	Lys	Glu	Gln	Val	Ser	Leu	Leu	Gly	Thr	Lys	Tyr	Glu	Ala	Asp
			85						90					95	
Gly	Ala	Pro	Val	Cys	Pro	Asp	Asp	Pro	Asn	Glu	Ala	Ala	Arg		
		100						105					110		

<210> 1125

<211> 555

<212> DNA

<213> Homo sapiens

<400> 1125

nncttgaatc gaatcggcat tgcgtctaaa catgacgttg agacactctc tgctaagctc  
60  
gaagagctga cggcattgct agaacgtgtc gcgcgtaaac actaaggaga catcgggatg  
120  
gctgttaaaa agactactca gaaagaaggc agctcgtgga tcggggaagt tgaaaaatat  
180  
tcccgtaaaa tctggcttgc tggtttaggc gtgtactcga aggttagcag tgacggcggc  
240  
aaatacttcg agacgttggt caaggacggc gagaaggccg agaagttgac caagagccca  
300  
gtcggtaaaa aagtagaggc ggcaaaagcg agcgcgggtt ctgcgaaatc gagcatttcg  
360  
gatacctggg gcaagttgga agagactttc gacaagcgtc tcaacagtgc tatttcgcga  
420  
ttgggcgtgc ccagcaaagc ggaactgaag acgctgcaca gcaaggtcga taccctgacc  
480  
aagcaaatcg aaaaactcac cggtgccaaa gtggccccgg ctaaaacggc agccgctaaa  
540  
cctgctgcca agctt  
555

<210> 1126



<211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 1126  
 Met Ala Val Lys Lys Thr Thr Gln Lys Glu Gly Ser Ser Trp Ile Gly  
 1 5 10 15  
 Glu Val Glu Lys Tyr Ser Arg Lys Ile Trp Leu Ala Gly Leu Gly Val  
 20 25 30  
 Tyr Ser Lys Val Ser Ser Asp Gly Gly Lys Tyr Phe Glu Thr Leu Val  
 35 40 45  
 Lys Asp Gly Glu Lys Ala Glu Lys Leu Thr Lys Ser Pro Val Gly Lys  
 50 55 60  
 Lys Val Glu Ala Ala Lys Ala Ser Ala Gly Ser Ala Lys Ser Ser Ile  
 65 70 75 80  
 Ser Asp Thr Trp Gly Lys Leu Glu Glu Thr Phe Asp Lys Arg Leu Asn  
 85 90 95  
 Ser Ala Ile Ser Arg Leu Gly Val Pro Ser Lys Ala Glu Leu Lys Thr  
 100 105 110  
 Leu His Ser Lys Val Asp Thr Leu Thr Lys Gln Ile Glu Lys Leu Thr  
 115 120 125  
 Gly Ala Lys Val Ala Pro Ala Lys Thr Ala Ala Ala Lys Pro Ala Ala  
 130 135 140  
 Lys Leu  
 145

<210> 1127  
 <211> 352  
 <212> DNA  
 <213> Homo sapiens

<400> 1127  
 cccgaccgcg tactcgtggt cgggtgccgga gtgatgggtg cagcacacgc acacgcgctc  
 60  
 cgcggttccc tccaggcagt cgtgtgcggc gtggtcgacc tgcaggagcg agcagcgcaa  
 120  
 tcaactcgtt cggaagtggg cgtaccgggg ttcaccgacc tgggtgaaggc gatcgagtcg  
 180  
 accgctccgg acgccgcggt catcgccacg ccggactcgg ctcaccgcca accggctgag  
 240  
 accgccatcg acgccggcct tgccgtcctg gtcgagaaac cgctcgccac gaccgtcgat  
 300  
 gacgccgaag cgatcgtgct ccgcgctgaa cgggccggcg tccgtctcat ga  
 352

<210> 1128  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 1128  
 Pro Asp Arg Val Leu Val Val Gly Ala Gly Val Met Gly Ala Ala His  
 1 5 10 15  
 Ala His Ala Leu Arg Gly Ser Leu Gln Ala Val Val Cys Gly Val Val

```

      20      25      30
Asp Leu Gln Glu Arg Ala Ala Gln Ser Leu Ala Ser Glu Val Gly Val
      35      40      45
Pro Gly Phe Thr Asp Leu Val Lys Ala Ile Glu Ser Thr Ala Pro Asp
      50      55      60
Ala Ala Val Ile Ala Thr Pro Asp Ser Ala His Arg Gln Pro Ala Glu
      65      70      75      80
Thr Ala Ile Asp Ala Gly Leu Ala Val Leu Val Glu Lys Pro Leu Ala
      85      90      95
Thr Thr Val Asp Asp Ala Glu Ala Ile Val Leu Arg Ala Glu Arg Ala
      100      105      110
Gly Val Arg Leu Met
      115

```

<210> 1129  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1129
ntggcagccc tggaggagcc gatggtggac ctggacggcg agctgccttt cgtgcggccc
60
ctgccccaca ttgccgtgct ccaggacgag ctgccgcaac tcttccagga tgacgacgtc
120
ggggccgatg aggaagaggc agagtgcgg ggcgaacaca cgctcacaga gaagtttgtc
180
tgcttgatg actcctttgg ccatgactgc agcttgacct gtgatgactg caggaacgga
240
gggacctgcc tcctgggcct ggatggctgg gattgccccg agggctggac tgggctcatc
300
tgcaatgaga cttggtcctc gggctgcatg gatatt
336

```

<210> 1130  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1130
Xaa Ala Ala Leu Glu Glu Pro Met Val Asp Leu Asp Gly Glu Leu Pro
1      5      10      15
Phe Val Arg Pro Leu Pro His Ile Ala Val Leu Gln Asp Glu Leu Pro
      20      25      30
Gln Leu Phe Gln Asp Asp Asp Val Gly Ala Asp Glu Glu Glu Ala Glu
      35      40      45
Leu Arg Gly Glu His Thr Leu Thr Glu Lys Phe Val Cys Leu Asp Asp
      50      55      60
Ser Phe Gly His Asp Cys Ser Leu Thr Cys Asp Asp Cys Arg Asn Gly
      65      70      75      80
Gly Thr Cys Leu Leu Gly Leu Asp Gly Trp Asp Cys Pro Glu Gly Trp
      85      90      95
Thr Gly Leu Ile Cys Asn Glu Thr Trp Ser Ser Gly Cys Met Asp Ile
      100      105      110

```

<210> 1131  
<211> 672  
<212> DNA  
<213> Homo sapiens

<400> 1131  
gcgttggtgg tgctcatggc ccgggaaaat ccgctggatc aatacctctt tgagcacccc  
60  
gaattattgt tctcgtcctc ggtggaatcg actgtgttgc acccggataa cccgtatgtg  
120  
ctcggcccgc acgtggccgc ggccgcccag gaggcatacc tctcccctgc ggacgaagag  
180  
ttttacgggt cggcctttgc cgggatatgc aaaacgctga caggccagaa cgtactgcga  
240  
cgtcgaggaa atcggctgtt ctggactcgt ccggaacggg ctgtcgacgc catcgacctg  
300  
cgatcggcgg caggcaaagg gattgacatt atcgacgtgt ccaccgggag ggatcatcggg  
360  
gtagtgcacg aagccgccgc agaccgtacc gtgcatccag gcgcggtgta cctgcatcag  
420  
ggggatcagt ggctggtcga cgaatacaac ccggtcgagc accacgcctt ggtgcaccag  
480  
gacctgccgg gatattggac tcaaccgcag tcagcgtcga cggtgagaat ccttcgggag  
540  
gagagacgtc gcgcttgtgg tcccggatat gtggcgtgcg ggcagggtgga actgacagag  
600  
caagttgttg ggtatctgcg tcgcgacgaa ttcaccaatg atgtgtggta ctcgctggcc  
660  
ctcgagatgc cc  
672

<210> 1132  
<211> 224  
<212> PRT  
<213> Homo sapiens

<400> 1132  
Ala Leu Val Val Leu Met Ala Arg Glu Asn Pro Leu Asp Gln Tyr Leu  
1 5 10 15  
Phe Glu His Pro Glu Leu Leu Phe Ser Ser Ser Val Glu Ser Thr Val  
20 25 30  
Leu His Pro Asp Asn Pro Tyr Val Leu Gly Pro His Val Ala Ala Ala  
35 40 45  
Ala Gln Glu Ala Tyr Leu Ser Pro Ala Asp Glu Glu Phe Tyr Gly Ser  
50 55 60  
Ala Phe Ala Gly Ile Cys Lys Thr Leu Thr Gly Gln Asn Val Leu Arg  
65 70 75 80  
Arg Arg Gly Asn Arg Leu Phe Trp Thr Arg Pro Glu Arg Ala Val Asp  
85 90 95  
Ala Ile Asp Leu Arg Ser Ala Ala Gly Lys Gly Ile Asp Ile Ile Asp  
100 105 110  
Val Ser Thr Gly Arg Val Ile Gly Val Val Asp Glu Ala Ala Ala Asp  
115 120 125  
Arg Thr Val His Pro Gly Ala Val Tyr Leu His Gln Gly Asp Gln Trp

130	135	140
Leu Val Asp Glu Tyr Asn Pro Val Glu His His Ala Leu Val His Gln		
145	150	155
Asp Leu Pro Gly Tyr Trp Thr Gln Pro Gln Ser Ala Ser Thr Val Arg		160
	165	170
Ile Leu Arg Glu Glu Arg Arg Arg Ala Cys Gly Pro Gly Tyr Val Ala		175
	180	185
Cys Gly Gln Val Glu Leu Thr Glu Gln Val Val Gly Tyr Leu Arg Arg		190
	195	200
Asp Glu Phe Thr Asn Asp Val Trp Tyr Ser Leu Ala Leu Glu Met Pro		205
210	215	220

<210> 1133  
 <211> 796  
 <212> DNA  
 <213> Homo sapiens

<400> 1133  
 acgcgtgaag ggggggtccag cgggtgtggc actcgatgac aagacagttt gagagcggct  
 60  
 tgtctccggg gacctggcgt aggtctcctc tgccttaacc cttggctttt gcacttcctc  
 120  
 tgtctgtcct ccatacaagc ttcttgcccc tagggaggac gggcttctta acagggggag  
 180  
 ccggttctctg tctaaccctc actggcatct tacactcttg gagatagctt cccctgaga  
 240  
 ggcgagttag ccacgtaagg ggaggtgggc gatggcttcc cttctgtctt gggttggggg  
 300  
 agtcaggtac agtatTTTTT cttttaaaagc atcattgatc acataataag gtttgtcata  
 360  
 gtctttaatc acagacctgt gaaatttgga gaattcacgg cacctaggat gggagtgagc  
 420  
 ttctgattgt gagctgattt gggagctaac ctcaaggaaa ctctcttgc aagccccctg  
 480  
 ctgggtgtcg gggccttcgc cagggaacct cgggggactc tggacgctct ttgtctgccc  
 540  
 ttctttttcc ctcacctgc tccccgtga gaaagtgggg ctcatgcagc tcagctcagt  
 600  
 gacagagggg ttattagggg tagctctggg acccatcttt tggtgatttc ttctctctct  
 660  
 ttctctaattg gaataattgt ttctgtctac acttctttat ttctctctct ctacagctgc  
 720  
 cttctaaaaa tgtgcttttc tgttcttgca gaactgaagc ttgcatggcc tttgttgtga  
 780  
 ctttcccttc acgcgt  
 796

<210> 1134  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1134  
 Met Gly Pro Arg Ala Thr Pro Asn Lys Pro Ser Val Thr Glu Leu Ser

```

      1           5           10           15
Cys Met Ser Pro Thr Phe Ser Arg Gly Ser Glu Val Arg Glu Lys Glu
      20           25           30
Gly Gln Thr Lys Ser Val Gln Ser Pro Arg Glu Val Pro Gly Glu Gly
      35           40           45
Pro Asp Thr Gln Gln Gly Ala Cys Lys Arg Ser Phe Leu Glu Val Ser
      50           55           60
Ser Gln Ile Ser Ser Gln Ser Glu Ala His Ser His Pro Arg Cys Arg
      65           70           75           80
Glu Phe Ser Lys Phe His Arg Ser Val Ile Lys Asp Tyr Asp Lys Pro
      85           90           95
Tyr Tyr Val Ile Asn Asp Ala Leu Lys Glu Lys Ile Leu Tyr Leu Thr
      100           105           110
Pro Pro Thr Gln Asp Arg Arg Glu Ala Ile Ala His Leu Pro Leu Arg
      115           120           125
Gly Ser Leu Ala Ser Gln Gly Glu Ala Ile Ser Gln Ser Val Arg Cys
      130           135           140
Gln Trp Gly
145

```

&lt;210&gt; 1135

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1135

```

gatcaggcca cacaggacaa cttcgagaag ggctccatct tcccaccctt caccagcatc
60
agaaagatct ctgcgcacat cgctgcagcc gtggctgcaa aagcctacga gctcgggtctg
120
gcgacccgtc tgctccccc cagcgacctg gtgaaatatg cagagaactg catgtacact
180
cccgtctacc gcaactaccg gtagtgctgc ggggatcaat tttgcagtaa taaaaaatct
240
actatcaacg cggatggtac tctgttggtt atagtccttg ctgctaacca cccttggtgc
300
tggtgctgct ggagaggcat tgtacctgct catgcatata tgatatatat atgttgtaac
360
gttgtgaaag caaact
376

```

&lt;210&gt; 1136

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1136

```

Asp Gln Ala Thr Gln Asp Asn Phe Glu Lys Gly Ser Ile Phe Pro Pro
      1           5           10           15
Phe Thr Ser Ile Arg Lys Ile Ser Ala His Ile Ala Ala Val Ala
      20           25           30
Ala Lys Ala Tyr Glu Leu Gly Leu Ala Thr Arg Leu Pro Pro Ser
      35           40           45
Asp Leu Val Lys Tyr Ala Glu Asn Cys Met Tyr Thr Pro Val Tyr Arg

```

50  
Asn Tyr Arg  
65

55

60

<210> 1137  
<211> 357  
<212> DNA  
<213> Homo sapiens

<400> 1137  
acgcgtcgct ggaacccgaa gatgaagcgc ttcattcttca ccgagcgcaa cggtatctac  
60  
atcattgacc tgcaccagtc gctgacctac attgataagg cgtacgcctt cgtcaaggag  
120  
actgtcgcca agggcggcca gattcttttc gtcggcacga agaagcaggc ccaggagtcc  
180  
atcgttgagc aggccactcg cggtggcatg ccctatgtca accagcgttg gcttggggga  
240  
atgctcacta atttccagac catctcgaag cgcattgccc ggctcaagga gctcgaggcc  
300  
atggactttg acaaggtttc cggctccggt ctcaccaaga aggagctgct tatgctc  
357

<210> 1138  
<211> 119  
<212> PRT  
<213> Homo sapiens

<400> 1138  
Thr Arg Arg Trp Asn Pro Lys Met Lys Arg Phe Ile Phe Thr Glu Arg  
1 5 10 15  
Asn Gly Ile Tyr Ile Ile Asp Leu His Gln Ser Leu Thr Tyr Ile Asp  
20 25 30  
Lys Ala Tyr Ala Phe Val Lys Glu Thr Val Ala Lys Gly Gly Gln Ile  
35 40 45  
Leu Phe Val Gly Thr Lys Lys Gln Ala Gln Glu Ser Ile Val Glu Gln  
50 55 60  
Ala Thr Arg Val Gly Met Pro Tyr Val Asn Gln Arg Trp Leu Gly Gly  
65 70 75 80  
Met Leu Thr Asn Phe Gln Thr Ile Ser Lys Arg Ile Ala Arg Leu Lys  
85 90 95  
Glu Leu Glu Ala Met Asp Phe Asp Lys Val Ser Gly Ser Gly Leu Thr  
100 105 110  
Lys Lys Glu Leu Leu Met Leu  
115

<210> 1139  
<211> 456  
<212> DNA  
<213> Homo sapiens

<400> 1139  
gtgcacaggc cgtctgaggg catgccgcgg acgatcgatc cgagtatggc ggcaccttca  
60

ccaatcccgt aggaccgctc tcgtccagca tcgaccaagg cgctgttgag gcgttcggct  
 120  
 tcggtaatga actcgatgcg ctcaatatcc acgggggtag cgaaatcgta gatcttggcc  
 180  
 agactgaggc cttggaggag cgcgccgctc ggggggacgt ggcttgccgc cgggcgttcc  
 240  
 ttgctctcaa ggacttcgct gtcgcggtcg acaaggaata cgtttgtgtg gtcgcctgca  
 300  
 atgcatgctc gagcgtggtg accatcgagg tgaaggacgg ttctggcata gaggtcatcg  
 360  
 tccacatcgg ccacagttag ttcgacgact cctgagtcga ctagatgacg cgccttctct  
 420  
 gccgcgtctt cgctgacgct gcccaggacc gctagc  
 456

<210> 1140

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1140

Met	Trp	Thr	Met	Thr	Ser	Met	Pro	Lys	Pro	Ser	Phe	Thr	Ser	Met	Val
1				5					10					15	
Thr	Thr	Leu	Glu	His	Ala	Leu	Gln	Ala	Thr	Thr	Gln	Thr	Tyr	Ser	Leu
		20					25						30		
Ser	Ala	Ala	Thr	Thr	Lys	Ser	Leu	Arg	Ala	Arg	Asn	Ala	Arg	Pro	Gln
		35					40				45				
Ala	Thr	Ser	Pro	Arg	Arg	Pro	Arg	Ser	Ser	Lys	Ala	Ser	Val	Trp	Pro
	50					55					60				
Arg	Ser	Thr	Ile	Ser	Leu	Pro	Pro	Trp	Ile	Leu	Ser	Ala	Ser	Ser	Ser
65				70					75					80	
Leu	Pro	Lys	Pro	Asn	Ala	Ser	Thr	Ala	Pro	Trp	Ser	Met	Leu	Asp	Glu
			85					90						95	
Thr	Gly	Pro	Thr	Gly	Leu	Val	Lys	Val	Pro	Pro	Tyr	Ser	Asp	Arg	Ser
		100					105						110		
Ser	Ala	Ala	Trp	Pro	Gln	Thr	Thr	Cys	Ala						
		115					120								

<210> 1141

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1141

ggcgccatgc tcggcgggct ggtgctgggt gtggccgaag cctttggcgc cgatatcttc  
 60  
 ggcgaccagt acaaggacgt ggtggcggtt ggctgttggt ttctggtgct gttgttcgt  
 120  
 ccgaccggca ttctgggccc tccggaggtt gagaaagtat gagcagatat cttaaactcg  
 180  
 cgtttttcag cgccctgttg gtgtgggccc tggcctttcc ggtactcggc ctcaagctga  
 240  
 gcattgtcgg gatcaaccac gaagtgcatt gcaccgggtc cgtgaccttg accatcatcg  
 300

ccctgtgctc ggtgccgatg ttctgcgcg tgctgtttac ccagcaagtc ggtg  
354

<210> 1142  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 1142  
Gly Ala Met Leu Gly Gly Leu Val Leu Gly Val Ala Glu Ala Phe Gly  
1 5 10 15  
Ala Asp Ile Phe Gly Asp Gln Tyr Lys Asp Val Val Ala Phe Gly Leu  
20 25 30  
Leu Val Leu Val Leu Leu Phe Arg Pro Thr Gly Ile Leu Gly Arg Pro  
35 40 45  
Glu Val Glu Lys Val  
50

<210> 1143  
<211> 353  
<212> DNA  
<213> Homo sapiens

<400> 1143  
acgcgttgca catccccag gaccatcaac cgcggcattg ccgcatagac ctggagatcc  
60  
catgcaacgt gaaatgaagt tcgaatcgat caaggcaaag gccaaaggcga tgctcatcgg  
120  
cgcagccgac gacacagcaa gcgcaggcgc gaccaaccga ggggtggctca acagcgccgc  
180  
attcgaaatc ctggcccacg tggccgtcaa tgcccaaacac tacgcgctct ccgagagacc  
240  
ggcgctggag gagttcgcca agagcttcca gccgcgcaac aaccaggact acgtggccgc  
300  
gatcgccaag aaggccgcga accacacccat gcatcccggc aggcagtcga ttt  
353

<210> 1144  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 1144  
Met His Gly Val Val Arg Gly Leu Leu Gly Asp Arg Gly His Val Val  
1 5 10 15  
Leu Val Val Ala Arg Leu Glu Ala Leu Gly Glu Leu Leu Gln Arg Arg  
20 25 30  
Ser Leu Gly Glu Arg Val Val Leu Gly Ile Asp Gly His Val Gly Gln  
35 40 45  
Asp Phe Glu Cys Gly Ala Val Glu Pro Pro Ser Val Gly Arg Ala Cys  
50 55 60  
Ala Cys Cys Val Val Gly Cys Ala Asp Glu His Arg Leu Gly Leu Cys  
65 70 75 80  
Leu Asp Arg Phe Glu Leu His Phe Thr Leu His Gly Ile Ser Arg Ser



Met Arg Gln Cys Arg Gly  
100

85

90

95

<210> 1145  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 1145  
gtcttcggcg ggctcggcct gttctattgc gtcacgaccc cgggtgtactg gttctcggcc  
60  
catgaagtgg cgggcacctg ggtactcggg ctgtcggcgg cgatggctct gatgggtgtt  
120  
ttctacgtcc aggtcatcgc caagaagatc aatcctcgac cctccgacga gaaggacgcc  
180  
gaggtgatcg acggggctgg tccggtcggg ttcttcccgc cacagagtat ctggccggtc  
240  
tgggtgcgcgc tcgttgtcgc catcatgtgc ctcgccccga tcttcggctg gtggatctct  
300  
ctgctcgggc tgggcattgt tatctgggcc gcctcggggt gggcttttga gtactaccgc  
360

<210> 1146  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 1146  
Val Phe Gly Gly Leu Gly Leu Phe Tyr Cys Val Met Thr Pro Val Tyr  
1 5 10 15  
Trp Phe Ser Ala His Glu Val Ala Gly Thr Trp Val Leu Gly Leu Ser  
20 25 30  
Ala Ala Met Ala Leu Met Val Phe Phe Tyr Val Gln Val Ile Ala Lys  
35 40 45  
Lys Ile Asn Pro Arg Pro Ser Asp Glu Lys Asp Ala Glu Val Ile Asp  
50 55 60  
Gly Ala Gly Pro Val Gly Phe Phe Pro Pro Gln Ser Ile Trp Pro Phe  
65 70 75 80  
Trp Cys Ala Leu Val Val Ala Ile Met Cys Leu Gly Pro Ile Phe Gly  
85 90 95  
Trp Trp Ile Ser Leu Leu Gly Leu Gly Ile Val Ile Trp Ala Ala Ser  
100 105 110  
Gly Trp Ala Phe Glu Tyr Tyr Arg  
115 120

<210> 1147  
<211> 409  
<212> DNA  
<213> Homo sapiens

<400> 1147  
tgtacattgg ctatgcagtc tggcctcctg aagggttatga tagtagccaa aaatatagaa  
60

gcaaaaaagg catccacctt cttcatcaat ccagaattga tcatgctcat gcctgtgggt  
 120  
 ggatcactat gtgctctcca aattggggagg ggaagtctac tctcctctct cctctctctc  
 180  
 ccaccttccc ctctctcttc tctcctttct attcccaggg cagtgggaaca tgatgaggtt  
 240  
 cttttccctt catggatatt ctctttctgc cctccacata aaggggcatt gatggatctt  
 300  
 caagaatggg atgcctttcc ctagaaaggc taaatattca tgaggctgaa tgtgaggatc  
 360  
 cagagtacac tgaaatataa ctgggtcatca gtacacatag aatctgatn  
 409

<210> 1148  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1148  
 Met Gln Ser Gly Leu Lys Val Met Ile Val Ala Lys Asn Ile Glu  
 1 5 10 15  
 Ala Lys Lys Ala Ser Thr Phe Phe Ile Asn Pro Glu Leu Ile Met Leu  
 20 25 30  
 Met Pro Val Gly Gly Ser Leu Cys Ala Leu Gln Ile Gly Arg Gly Ser  
 35 40 45  
 Leu Leu Ser Ser Leu Leu Ser Leu Pro Pro Ser Pro Leu Ser Ser Leu  
 50 55 60  
 Leu Ser Ile Pro Arg Ala Val Glu His Asp Glu Val Leu Phe Pro Ser  
 65 70 75 80  
 Trp Ile Ser Ser Phe Cys Pro Pro His Lys Gly Ala Leu Met Asp Leu  
 85 90 95  
 Gln Glu Trp Asp Ala Phe Pro  
 100

<210> 1149  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 1149  
 gtcgacttct gcatggaaaa acgcgatctg gtgattgagc acgttgcgga gatgtacggc  
 60  
 cgtgaggcgg tatcgagat cattaccttc ggtaccatgg cggcgaaagc gggtattcgt  
 120  
 gacgtggggc gtgtactggg tcacccgtat ggcttcgtcg atcgcatttc caagctgggt  
 180  
 ccgccccgatc cgggcatgac gctggaaaaa gcctttgccg ccgaaccgca gttgccggaa  
 240  
 atctacgagg ccgatgagga agtcaaagcg ctgatcgaca tggcgcgcaa gctgggaagg  
 300  
 gtgacgcgg  
 309

<210> 1150

<211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1150  
 Val Asp Phe Cys Met Glu Lys Arg Asp Leu Val Ile Glu His Val Ala  
 1 5 10 15  
 Glu Met Tyr Gly Arg Glu Ala Val Ser Gln Ile Ile Thr Phe Gly Thr  
 20 25 30  
 Met Ala Ala Lys Ala Val Ile Arg Asp Val Gly Arg Val Leu Gly His  
 35 40 45  
 Pro Tyr Gly Phe Val Asp Arg Ile Ser Lys Leu Val Pro Pro Asp Pro  
 50 55 60  
 Gly Met Thr Leu Glu Lys Ala Phe Ala Ala Glu Pro Gln Leu Pro Glu  
 65 70 75 80  
 Ile Tyr Glu Ala Asp Glu Glu Val Lys Ala Leu Ile Asp Met Ala Arg  
 85 90 95  
 Lys Leu Gly Arg Val Thr Arg  
 100

<210> 1151  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 1151  
 gcgcgcattt tttgcaaccc aagcgacgtc attatggccg agtcgcccgc ttatgtcggg  
 60  
 gcgctcaata ccttcgcctc gtaccaaact gaggtcattc acgtcgacat ggacgacagc  
 120  
 ggggttggttc cggaatccct gcgtgagaaa gtgactgcag cgcgtcaaga cggcaagtcg  
 180  
 gtgaagttcc tttacacggt tcttaactac tcgaaccctg cggaatctc gcaatccacc  
 240  
 gagcgtcgcc gggagatcct agcgggtggct gacgagctgg atctgttggt ggttgaggac  
 300  
 aaccctgacg gggtactcaa cctcgatggt gatccactgc cgacgttgaa gtcgatggat  
 360

<210> 1152  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1152  
 Ala Arg Ile Phe Cys Asn Pro Ser Asp Val Ile Met Ala Glu Ser Pro  
 1 5 10 15  
 Ala Tyr Val Gly Ala Leu Asn Thr Phe Ala Ser Tyr Gln Thr Glu Val  
 20 25 30  
 Ile His Val Asp Met Asp Asp Ser Gly Leu Val Pro Glu Ser Leu Arg  
 35 40 45  
 Glu Lys Val Thr Ala Ala Arg Gln Asp Gly Lys Ser Val Lys Phe Leu  
 50 55 60  
 Tyr Thr Val Pro Asn Tyr Ser Asn Pro Ser Gly Ile Ser Gln Ser Thr



<210> 1155  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 1155  
 ctttaagttat tttggtcttt gcctctctcc tcaggttgtg aagattacag aaatctggga  
 60  
 tggcttatgg gacgcttctc agccctaagt aggaaaacag cagtgaaaat ggcaacccaaa  
 120  
 acatcacgca ggactggggg ttttggggaa acagctcact ttagagcagt gcagtgtaga  
 180  
 gctttccgtc ttctaccagg gtccaccttt aacactgttt atctgaaaat tttccccctg  
 240  
 gcttactcgc ttgcagctgc ccactttgca gaaagatggc gctctgatct ctacgctccc  
 300  
 tgttccttca gggactccat agtatTTTTT ttcacgcgt  
 339

<210> 1156  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1156  
 Met Gly Arg Phe Ser Ala Leu Ser Arg Lys Thr Ala Val Lys Met Ala  
 1 5 10 15  
 Thr Lys Thr Ser Arg Arg Thr Gly Gly Phe Gly Glu Thr Ala His Phe  
 20 25 30  
 Arg Ala Val Gln Cys Arg Ala Phe Arg Leu Leu Pro Gly Ser Thr Phe  
 35 40 45  
 Asn Thr Val Tyr Leu Lys Ile Phe Pro Leu Ala Tyr Ser Leu Ala Ala  
 50 55 60  
 Ala His Phe Ala Glu Arg Trp Arg Ser Asp Leu Tyr Ala Pro Cys Ser  
 65 70 75 80  
 Phe Arg Asp Ser Ile Val Phe Phe Phe Thr Arg  
 85 90

<210> 1157  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1157  
 nnacagcctc tctccgaccc ggcgggcggtt gcacacgtcc ccgtctgagg agtattcgtg  
 60  
 ctggcaaaaac tcgtgacccg acacctgagg gcctatcggt tgcacgttgc cgatcatcatc  
 120  
 gttatgcagg tttgcgccca aatcgcgggc ctgaccttgc caaccatcaa cgcagacatc  
 180  
 atcaacaagg gcgtcgtgac agcggatacc ggatatgtca ccaccactc cctcttcatg  
 240  
 ctggcggtcg ctttagggca ggccatctgc caggtcattg cggtttatct cgcgcgtcag  
 300

gtggcgatgg gaatgggccc tgacgttcgc gacgccatct tcacccgcac ccttgacttc  
 360  
 tcggcccgagg agatcaacaa attcggagca ccatcactca ttacccggac taccaacgac  
 420  
 gtccag  
 426

<210> 1158  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1158  
 Val Leu Ala Lys Leu Val Thr Arg His Leu Arg Ala Tyr Arg Leu His  
 1 5 10 15  
 Val Ala Val Ile Ile Val Met Gln Val Cys Ala Gln Ile Ala Ala Leu  
 20 25 30  
 Thr Leu Pro Thr Ile Asn Ala Asp Ile Ile Asn Lys Gly Val Val Thr  
 35 40 45  
 Ala Asp Thr Gly Tyr Val Thr Thr His Ser Leu Phe Met Leu Ala Val  
 50 55 60  
 Ala Leu Gly Gln Ala Ile Cys Gln Val Ile Ala Val Tyr Leu Ala Ala  
 65 70 75 80  
 Gln Val Ala Met Gly Met Gly Arg Asp Val Arg Asp Ala Ile Phe Thr  
 85 90 95  
 Arg Thr Leu Asp Phe Ser Ala Arg Glu Ile Asn Lys Phe Gly Ala Pro  
 100 105 110  
 Ser Leu Ile Thr Arg Thr Thr Asn Asp Val Gln  
 115 120

<210> 1159  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1159  
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 60  
 ggacgaggca ggagcaggcc gggctctcgc catgggtcac tgcgcctct gccacgggaa  
 120  
 gttttcctcg agaagcctgc gcagcatctc cgagagggcg cctggagcga gcatggagag  
 180  
 gccatccgca gaggagcgcg tgctcgtacg ggacttccag cgctgcttg gtgtggctgt  
 240  
 ccgccaggac cccaccttgt ctccgtttgt ctgcaagagc tgccacgccc agttctacca  
 300  
 gtgccacagc cttctcaagt ccttcctgca gagggtcaac gcctccccgg ctggtcgccg  
 360  
 gaagccttgt gcaaaggctc gtgcccagcc cccaacaggg gcagaggagg gagcgtgtct  
 420  
 ggtggatctg atca  
 434

<210> 1160

<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1160  
 Met Gly His Cys Arg Leu Cys His Gly Lys Phe Ser Ser Arg Ser Leu  
 1 5 10 15  
 Arg Ser Ile Ser Glu Arg Ala Pro Gly Ala Ser Met Glu Arg Pro Ser  
 20 25 30  
 Ala Glu Glu Arg Val Leu Val Arg Asp Phe Gln Arg Leu Leu Gly Val  
 35 40 45  
 Ala Val Arg Gln Asp Pro Thr Leu Ser Pro Phe Val Cys Lys Ser Cys  
 50 55 60  
 His Ala Gln Phe Tyr Gln Cys His Ser Leu Leu Lys Ser Phe Leu Gln  
 65 70 75 80  
 Arg Val Asn Ala Ser Pro Ala Gly Arg Arg Lys Pro Cys Ala Lys Val  
 85 90 95  
 Gly Ala Gln Pro Pro Thr Gly Ala Glu Glu Gly Ala Cys Leu Val Asp  
 100 105 110  
 Leu Ile

<210> 1161  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

<400> 1161  
 ctgcacacac accaggccac gcccacgagg acggccagtc agcatgcagc caatacacc  
 60  
 acagagggat ggggagcagc cctcagtgcc agctccaaca ggcccactgc aggtcctgtc  
 120  
 actgcaccca aggagctgcc ttccatttca cctgacattt ccactaaggg cccagcgttt  
 180  
 atcattccag aagagcagca ggcagaacct tcacctcca agagctgcaa gtgcgctgtg  
 240  
 gcaggaaaag aagatctggc gtctgaagtc agctcctgct ctccaggaaa agagggacga  
 300  
 tgacatagga cttgagcaaa atgagagccc cgtgatggga gagaacacct gatca  
 355

<210> 1162  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1162  
 Met Gln Pro Ile His Pro Gln Arg Asp Gly Glu Gln Pro Ser Val Pro  
 1 5 10 15  
 Ala Pro Thr Gly Pro Leu Gln Val Leu Ser Leu His Pro Arg Ser Cys  
 20 25 30  
 Leu Pro Phe His Leu Thr Phe Pro Leu Arg Ala Gln Arg Leu Ser Phe  
 35 40 45  
 Gln Lys Ser Ser Arg Gln Asn Leu His Leu Pro Arg Ala Ala Ser Ala

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      50              55              60
Leu Trp Gln Glu Lys Lys Ile Trp Arg Leu Lys Ser Ala Pro Ala Leu
65              70              75              80
Gln Glu Lys Arg Asp Asp Asp Ile Gly Leu Glu Gln Asn Glu Ser Pro
      85              90              95
Val Met Gly Glu Asn Thr
      100

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<210> 1163  
 <211> 466  
 <212> DNA  
 <213> Homo sapiens

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<400> 1163
ngcgcgccag gaagcgggag gtcagctgta caccagggt aatagaactt ctaccctcag
60
aggagtcaaa gagaaggcag aactatggca ggaaagctcc ggaagtccca catccctgga
120
gtgagcatct ggcagctggt ggaggagatc cctgaaggct gcagcacgcc ggactttgag
180
cagaagcccg tcacctcggc tctgccagag gggaaaaatg ctgtctttcg ggctgtggtc
240
tgtggggagc ccaggcccga ggtgcggttg cagaactcca aagggtgacct cagtgattcc
300
agcaagtaca agatctcctc cagccctggc agcaaggagc acgtgctgca gatcaacaag
360
ctgacaggcg aggacacgga tctgtaccac tgcacagcag taaatgcgta cggagaggcc
420
gcttgctcag tgagactcac cgtcatcgaa gttggctttc ggaaga
466

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<210> 1164  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

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<400> 1164
Met Ala Gly Lys Leu Arg Lys Ser His Ile Pro Gly Val Ser Ile Trp
1      5      10      15
Gln Leu Val Glu Glu Ile Pro Glu Gly Cys Ser Thr Pro Asp Phe Glu
20     25     30
Gln Lys Pro Val Thr Ser Ala Leu Pro Glu Gly Lys Asn Ala Val Phe
35     40     45
Arg Ala Val Val Cys Gly Glu Pro Arg Pro Glu Val Arg Trp Gln Asn
50     55     60
Ser Lys Gly Asp Leu Ser Asp Ser Ser Lys Tyr Lys Ile Ser Ser Ser
65     70     75     80
Pro Gly Ser Lys Glu His Val Leu Gln Ile Asn Lys Leu Thr Gly Glu
85     90     95
Asp Thr Asp Leu Tyr His Cys Thr Ala Val Asn Ala Tyr Gly Glu Ala
100    105    110
Ala Cys Ser Val Arg Leu Thr Val Ile Glu Val Gly Phe Arg Lys
115    120    125

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<210> 1165  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

<400> 1165  
 tgggtggttc cggacacana aaatcacgtg ttgaaccgaa tttcaggcat ggtgaaaggc  
 60  
 tgcttttagta aagtccttgt tgagccgcgt ctgctcaagc tcaacttgac nattatgtgt  
 120  
 ctgcacattc tgctgatgtc cacgttcgtg gccctgcccg gtcagttggc tgcagcagga  
 180  
 ttccccgccg ctgaacactg gaaagtgtat ctggtgacga tgctcatctc cttcgtctcc  
 240  
 gttgtccctt tcattatcta tgcagaagtg aaacgccgca tgaagcgcgt attcctgacg  
 300  
 tgtgttgccg tgctgttgat tgccgaaatc gtactatggg gctccgggtcc acacttctgg  
 360  
 gaactggtca tcggcgtaga gcttttcttc ctgccttta atctcatgga agcc  
 414

<210> 1166  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 1166  
 Trp Val Val Pro Asp Thr Xaa Asn His Val Leu Asn Arg Ile Ser Gly  
 1 5 10 15  
 Met Val Lys Gly Cys Phe Ser Lys Val Leu Val Glu Pro Arg Leu Leu  
 20 25 30  
 Lys Leu Asn Leu Thr Ile Met Cys Leu His Ile Leu Leu Met Ser Thr  
 35 40 45  
 Phe Val Ala Leu Pro Gly Gln Leu Ala Ala Ala Gly Phe Pro Ala Ala  
 50 55 60  
 Glu His Trp Lys Val Tyr Leu Val Thr Met Leu Ile Ser Phe Val Ser  
 65 70 75 80  
 Val Val Pro Phe Ile Ile Tyr Ala Glu Val Lys Arg Arg Met Lys Arg  
 85 90 95  
 Val Phe Leu Thr Cys Val Ala Leu Leu Leu Ile Ala Glu Ile Val Leu  
 100 105 110  
 Trp Gly Ser Gly Pro His Phe Trp Glu Leu Val Ile Gly Val Gln Leu  
 115 120 125  
 Phe Phe Leu Ala Phe Asn Leu Met Glu Ala  
 130 135

<210> 1167  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1167  
 gtcgaccccc tgggcaagag tcgcggtcccc tgacgataac ttcacccccg cggccttgag  
 60

ctgttgggac cggctggcta aggcctgggc accggtagcg gcctgggtgga taccctcatg  
 120  
 tagccgggtg acctgcctga ccattcttcgg caaaccagtg cgcagttgtg tggatgaactc  
 180  
 attgaccctt cgagacagtc gtgaggaacc gtcagcaagt tcgtcgatgc cgtcgatgat  
 240  
 gctcttgcca gagttcggat ccttgatcgc catcgcttg acggccaccc ccgaccacgc  
 300  
 ccgcacgccc agggcgtacc catcggtcat cgcgtcgcg acgatgggta ccaggtcgtg  
 360  
 gcattcctgc gcggtgtggc ttcgcacgca tcgacgcagg aagtcagcct cgcctcgga  
 420  
 cagggcttcc ttactaagtt ccgcggtttt ctttcccgac gcgt  
 464

&lt;210&gt; 1168

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1168

Met	Thr	Asp	Gly	Tyr	Ala	Leu	Gly	Val	Arg	Ala	Gly	Ser	Gly	Val	Ala
1				5					10					15	
Val	Lys	Ala	Met	Ala	Ile	Lys	Asp	Pro	Asn	Ser	Gly	Lys	Ser	Ile	Asp
		20					25						30		
Asp	Gly	Ile	Asp	Glu	Leu	Ala	Asp	Gly	Ser	Ser	Arg	Leu	Ser	Arg	Gly
		35					40					45			
Val	Asn	Glu	Phe	Thr	Thr	Gln	Leu	Arg	Thr	Gly	Leu	Pro	Lys	Met	Val
	50					55				60					
Arg	Gln	Val	Thr	Arg	Leu	His	Glu	Gly	Ile	His	Gln	Ala	Ala	Thr	Gly
65					70					75				80	
Ala	Gln	Ala	Leu	Ala	Ser	Arg	Ser	Gln	Gln	Leu	Lys	Ala	Gly	Gly	Val
			85					90						95	
Lys	Leu	Ser	Ser	Gly	Ala	Ala	Thr	Leu	Ala	His	Gly	Val	Asp		
			100					105						110	

&lt;210&gt; 1169

&lt;211&gt; 486

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1169

nacgcgtgaa gggagcagaa cggacaccag ttactagtgg ctctgggtcgg ggacagcctc  
 60  
 ctagagcctt tctggccaat gggaacagga atagcccggg gctttctagc tgctatggac  
 120  
 tctgcctgga tgggtccgaag ttggtctcta ggaacgagcc ctttggaagt gctggcagag  
 180  
 agggaaagta ttacaggtt gctgcctcag accaccctg agaatgtgag taagaacttc  
 240  
 agccagtaca gtatcgaccc tgtaactcgg tatcccaata tcaacgtcaa cttcctccgg  
 300  
 ccaagccagg tgcgccattt atatgatact ggcgaaacaa aagatattca cctggaaatg  
 360

gagagcctgg tgaattcccg aaccaccccc aaattgactc gcaatgagtc tgtagctcgt  
 420  
 tcaagcaaac tgctgggttg gtgccagagg cagacagatg gctatgcagg ggtaaactg  
 480  
 acagat  
 486

<210> 1170  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 1170  
 Arg Glu Gln Asn Gly His Gln Leu Leu Val Ala Leu Val Gly Asp Ser  
 1 5 10 15  
 Leu Leu Glu Pro Phe Trp Pro Met Gly Thr Gly Ile Ala Arg Gly Phe  
 20 25 30  
 Leu Ala Ala Met Asp Ser Ala Trp Met Val Arg Ser Trp Ser Leu Gly  
 35 40 45  
 Thr Ser Pro Leu Glu Val Leu Ala Glu Arg Glu Ser Ile Tyr Arg Leu  
 50 55 60  
 Leu Pro Gln Thr Thr Pro Glu Asn Val Ser Lys Asn Phe Ser Gln Tyr  
 65 70 75 80  
 Ser Ile Asp Pro Val Thr Arg Tyr Pro Asn Ile Asn Val Asn Phe Leu  
 85 90 95  
 Arg Pro Ser Gln Val Arg His Leu Tyr Asp Thr Gly Glu Thr Lys Asp  
 100 105 110  
 Ile His Leu Glu Met Glu Ser Leu Val Asn Ser Arg Thr Thr Pro Lys  
 115 120 125  
 Leu Thr Arg Asn Glu Ser Val Ala Arg Ser Ser Lys Leu Leu Gly Trp  
 130 135 140  
 Cys Gln Arg Gln Thr Asp Gly Tyr Ala Gly Val Asn Val Thr Asp  
 145 150 155

<210> 1171  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 1171  
 acgcgttcaa caaagcacag aaccggagat gcagtgggag ccgagagcag gaagcgcgga  
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 ggcagcgcca ggtgctggcg ctgcccagagg ccccgtagca agtggggccc atagcagccg  
 120  
 actcgctaga ccctcccaaa acgcacacca cgcgcgacca ggaccgagag gcccgcacgg  
 180  
 ccctgctagg ccacaaacac tccactgtct ccagggtaaa agacaaacac agcctcgctt  
 240  
 gtccctccaa gagtacaacc tctgtctgat gaaaaacaaa cgaccagag aggaggcagc  
 300  
 tgccgggaca ctgcaggctg ggcccgcgc gcccttgag ggcagggtcaa aatcccggaa  
 360  
 caggcacagt gttcaggctg attgactgtc ccaggccagg gcggcctcaa ctgccagagc  
 420

acctcctac  
429

<210> 1172  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 1172  
Met Gln Trp Glu Pro Arg Ala Gly Ser Ala Glu Ala Ala Pro Gly Ala  
1 5 10 15  
Gly Ala Ala Arg Gly Pro Val Pro Ser Gly Ala His Ser Ser Arg Leu  
20 25 30  
Ala Arg Pro Ser Gln Asn Ala His His Ala Arg Pro Gly Pro Arg Gly  
35 40 45  
Pro His Gly Pro Ala Arg Pro Gln Thr Leu His Cys Leu Gln Gly Lys  
50 55 60  
Arg Gln Thr Gln Pro Arg Leu Ser Leu Gln Glu Tyr Asn Leu Cys Leu  
65 70 75 80  
Met Lys Asn Lys Arg Pro Arg Glu Glu Ala Ala Gly Thr Leu Gln  
85 90 95  
Ala Gly Pro Ala Ala Pro Leu Glu Gly Arg Ser Lys Ser Arg Asn Arg  
100 105 110  
His Ser Val Gln Ala Asp  
115

<210> 1173  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 1173  
cgcggtcaatg acgacggcga gcattctgcc gagcagggtga tgcgagccac ccgcggtgct  
60  
ggacttgggg ccgaggccaa gcgtcgcatc atcttgggta cctatgcctt gtcggctggg  
120  
tactatgacg cctactacgg ctcggtcag aaagtccgta ccctcatcca acgcgacttc  
180  
gagaaagcat ggcagatgtg cgatgtgctc gtgtcaccgg ccacgccaac gactgccttc  
240  
cggctgggtg agcgtactgc tgaccgatg gcgatgtacc gtcctgatct atgcacggtc  
300  
ccggccaata tggccggaag tcccgcagga tctttcccga tcggtctatc agagaccgac  
360  
ggcatgcccg tcggcatgca ggtgatggcg ccaatcatgg cggacgatcg aatctaccga  
420  
gttggggccg ctcta  
435

<210> 1174  
<211> 145  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1174

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Arg Val Asn Asp Asp Gly Glu His Ser Ala Glu Gln Val Met Arg Ala
 1           5           10           15
Thr Arg Gly Ala Gly Leu Gly Ala Glu Ala Lys Arg Arg Ile Ile Leu
      20           25           30
Gly Thr Tyr Ala Leu Ser Ala Gly Tyr Tyr Asp Ala Tyr Tyr Gly Ser
      35           40           45
Ala Gln Lys Val Arg Thr Leu Ile Gln Arg Asp Phe Glu Lys Ala Trp
      50           55           60
Gln Met Cys Asp Val Leu Val Ser Pro Ala Thr Pro Thr Thr Ala Phe
      65           70           75           80
Arg Leu Gly Glu Arg Thr Ala Asp Pro Met Ala Met Tyr Arg Ser Asp
      85           90           95
Leu Cys Thr Val Pro Ala Asn Met Ala Gly Ser Pro Ala Gly Ser Phe
      100          105          110
Pro Ile Gly Leu Ser Glu Thr Asp Gly Met Pro Val Gly Met Gln Val
      115          120          125
Met Ala Pro Ile Met Ala Asp Asp Arg Ile Tyr Arg Val Gly Ala Ala
      130          135          140
Leu
145

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&lt;210&gt; 1175

&lt;211&gt; 729

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1175

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gatcgactg caatccaccc acatctactt gatatgaaaa ttggtcaagg caaatatgag
60
caggggttct ttccaaagtt acagtcgat gtcttggcaa caggaccaac cagtaacaat
120
cgctgggtaa gtcggagtgc cactgcacag cgcaggaaag gacgccttcg ccagcattct
180
gagcatgttg ggctggacaa cgacttgagg gagaaatata tgcaagaggc acgaagttaa
240
ggaaaaaacc tgaggcaacc caaactgtca gacctctctc ctgcagttat tgcacagacc
300
aactgtaaat tcgtagaagg cttattaaaa gaatgtagaa ataagacaaa gcgcatgttg
360
gtggagaaga tgggacatga agcgggtggaa cttggccatg gagaagcaaa catcaccggc
420
ctggaggaga acaccttgat cgccagcctt tgtgacctgc tggagaggat atggagccat
480
ggcttgcagg tcaagcaggg gaagtcggtt ttgtggtcac atttaattcc ttttcaggac
540
agagaagaga accaagagcc ccttgcagaa tcaccagttg cctcggacc agaaagaaaa
600
aaatctgact caggagttat gttgccaaac ctcagggtct ctcttattca ggacatgagg
660
catattcaaa acatgagtga gatcaagact gatgttggac gagctcgggc gtggataaga
720
ctgtctcta
729

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<210> 1176  
 <211> 243  
 <212> PRT  
 <213> Homo sapiens

<400> 1176  
 Asp Arg Thr Ala Ile His Pro His Leu Leu Asp Met Lys Ile Gly Gln  
 1 5 10 15  
 Gly Lys Tyr Glu Gln Gly Phe Phe Pro Lys Leu Gln Ser Asp Val Leu  
 20 25 30  
 Ala Thr Gly Pro Thr Ser Asn Asn Arg Trp Val Ser Arg Ser Ala Thr  
 35 40 45  
 Ala Gln Arg Arg Lys Gly Arg Leu Arg Gln His Ser Glu His Val Gly  
 50 55 60  
 Leu Asp Asn Asp Leu Arg Glu Lys Tyr Met Gln Glu Ala Arg Ser Leu  
 65 70 75 80  
 Gly Lys Asn Leu Arg Gln Pro Lys Leu Ser Asp Leu Ser Pro Ala Val  
 85 90 95  
 Ile Ala Gln Thr Asn Cys Lys Phe Val Glu Gly Leu Leu Lys Glu Cys  
 100 105 110  
 Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys Met Gly His Glu Ala  
 115 120 125  
 Val Glu Leu Gly His Gly Glu Ala Asn Ile Thr Gly Leu Glu Glu Asn  
 130 135 140  
 Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu Arg Ile Trp Ser His  
 145 150 155 160  
 Gly Leu Gln Val Lys Gln Gly Lys Ser Val Leu Trp Ser His Leu Ile  
 165 170 175  
 Pro Phe Gln Asp Arg Glu Glu Asn Gln Glu Pro Leu Ala Glu Ser Pro  
 180 185 190  
 Val Ala Leu Gly Pro Glu Arg Lys Lys Ser Asp Ser Gly Val Met Leu  
 195 200 205  
 Pro Thr Leu Arg Val Ser Leu Ile Gln Asp Met Arg His Ile Gln Asn  
 210 215 220  
 Met Ser Glu Ile Lys Thr Asp Val Gly Arg Ala Arg Ala Trp Ile Arg  
 225 230 235 240  
 Leu Ser Leu

<210> 1177  
 <211> 581  
 <212> DNA  
 <213> Homo sapiens

<400> 1177  
 acgcgtgatg agttgcgcga gaccagcaac tgcagccgaa tacagttttc ttgtgtaccc  
 60  
 cgtcgcacag ctgcgagagg tgggcattgc cgagtgaggc aacgatgtct aaggcggaaa  
 120  
 gctcatcctc ggcagacggg aagactttgt cgtcggggat gttgtcaatg agagcgggga  
 180  
 cgtcgatctc ggtactgccc atggcgatcat gaaggatcgc gcgatacggg gcgacgaccc  
 240

cgatgagggc gtcgtcgaat ccagcgatga tcgatacctc tctcggttagc acgtccgtgg  
 300  
 ccaacaggtg gtcgacttgg gcgggggcta gccatgtaat tgttccgagc acatggaggg  
 360  
 tggctgccag gaggcggatg gccggttctg gggcatcttt ggagatcttc agccggacat  
 420  
 cagtgggcag tccggccggg acttggcaga gggcctgggc gggatgggag cgctgggcga  
 480  
 cgacgaaacg ccccgacgcc gtaacgccgt gggcttggag atcgcaggtc cacttctctg  
 540  
 ggctttcacc ggcagagatc atggtgtgga ccaccattgt g  
 581

<210> 1178

<211> 192

<212> PRT

<213> Homo sapiens

<400> 1178

Met	Val	Val	His	Thr	Met	Ile	Ser	Ala	Gly	Glu	Ser	Pro	Glu	Lys	Trp
1				5					10					15	
Thr	Cys	Asp	Leu	Gln	Ala	His	Gly	Val	Thr	Ala	Ser	Gly	Arg	Phe	Val
			20					25					30		
Val	Ala	Gln	Arg	Ser	His	Pro	Ala	Gln	Ala	Leu	Cys	Gln	Val	Pro	Ala
		35					40				45				
Gly	Leu	Pro	Thr	Asp	Val	Arg	Leu	Lys	Ile	Ser	Lys	Asp	Ala	Pro	Glu
	50					55					60				
Pro	Ala	Ile	Arg	Leu	Leu	Ala	Ala	Thr	Leu	His	Val	Leu	Gly	Thr	Ile
65					70					75				80	
Thr	Trp	Leu	Ala	Pro	Ala	Gln	Val	Asp	His	Leu	Leu	Ala	Thr	Asp	Val
				85				90						95	
Leu	Pro	Arg	Glu	Val	Ser	Ile	Ile	Ala	Gly	Phe	Asp	Asp	Ala	Leu	Ile
			100					105					110		
Gly	Val	Val	Ala	Pro	Tyr	Arg	Ala	Ile	Leu	His	Asp	Ala	Met	Gly	Ser
	115					120					125				
Thr	Glu	Ile	Asp	Val	Pro	Ala	Leu	Ile	Asp	Asn	Ile	Pro	Asp	Asp	Lys
	130					135					140				
Val	Phe	Pro	Ser	Ala	Glu	Asp	Glu	Leu	Ser	Ala	Leu	Asp	Ile	Val	Ala
145					150					155				160	
Ser	Leu	Gly	Asn	Ala	His	Leu	Ser	Gln	Leu	Cys	Asp	Gly	Val	His	Lys
			165					170					175		
Lys	Thr	Val	Phe	Gly	Cys	Ser	Cys	Trp	Ser	Arg	Ala	Thr	His	His	Ala
		180						185					190		

<210> 1179

<211> 597

<212> DNA

<213> Homo sapiens

<400> 1179

gtgcactttc tggcttctaa ctgtggcccc agccctgact ccttgaggtg ctctgtgtgt  
 60  
 gattggggct tctggacatg ctgccacaag atgtctggaa actccagggg gcacctgccg  
 120

agaccctgcc ctgggaacgg ccggaagaat cccaaaacat gagattccgg tgcagctgag  
 180  
 ccccgccaat tcattgtctc tttcagtccc ttctgaaggc tgcatttggc aatgtgaccc  
 240  
 tcgggggtggg gaaggcatca gaggaatata ggctatggga cgccagaggc agcgtcctgg  
 300  
 ggacaaagcc cacttcttcc catgcccagg gcttcctcat ggaccagca tgggtggacgt  
 360  
 ggccctcaga cgtccatggg tgggtggggga ggcacgtgct gtttggccct gtctctgctc  
 420  
 agagtctcat aggaagatgc atgggtccaca caacagtgag tcggcaggga gtccaggctt  
 480  
 cccctcccaa ccagtgggtg tgagacgctt ggtttataac ccaagatccc ttgtcccatt  
 540  
 ggtgcctcct gaatctccca cctcccgagg cacctgcatg gcctctacct gacgcgt  
 597

<210> 1180

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1180

Met	Gly	Arg	Gln	Arg	Gln	Arg	Pro	Gly	Asp	Lys	Ala	His	Phe	Phe	Pro
1			5					10					15		
Cys	Pro	Gly	Leu	Pro	His	Gly	Pro	Ser	Met	Val	Asp	Val	Ala	Leu	Arg
			20				25						30		
Arg	Pro	Trp	Val	Val	Gly	Glu	Ala	Arg	Ala	Val	Trp	Pro	Cys	Leu	Cys
			35			40						45			
Ser	Glu	Ser	His	Arg	Lys	Met	His	Gly	Pro	His	Asn	Ser	Glu	Ser	Ala
	50				55						60				
Gly	Ser	Pro	Gly	Phe	Pro	Ser	Gln	Pro	Val	Val	Leu	Arg	Arg	Leu	Val
	65			70					75					80	
Tyr	Asn	Pro	Arg	Ser	Leu	Val	Pro	Leu	Val	Pro	Pro	Glu	Ser	Pro	Thr
			85				90							95	
Ser	Arg	Gly	Thr	Cys	Met	Ala	Ser	Thr							
			100					105							

<210> 1181

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1181

gtcgactacc tcgatgtttc cccgcgtcag atgggtctccg tggctactgc catgattccg  
 60  
 ttctctcgagc acgacgacgc taaccgtgcc ctgatgggtg cgaacatgca gcgtcaggct  
 120  
 gtgccgctgc tgcgttcgga ggctccgttc gtcgggtaccg gtatggagca gcgtgctgct  
 180  
 tacgacgccg gcgatgtcat tgtcgcttcg gccacagggtg tggctcgagac cgtgtcggca  
 240  
 ggcttcatca ccatcatgga cgatgagggc cagcgccaca cctacctgct gcgcaagttc  
 300



gagcgcacca accagggcac ctgctacaac cagaagccac tgttgacgag gg  
352

<210> 1182  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 1182  
Val Asp Tyr Leu Asp Val Ser Pro Arg Gln Met Val Ser Val Ala Thr  
1 5 10 15  
Ala Met Ile Pro Phe Leu Glu His Asp Asp Ala Asn Arg Ala Leu Met  
20 25 30  
Gly Ala Asn Met Gln Arg Gln Ala Val Pro Leu Leu Arg Ser Glu Ala  
35 40 45  
Pro Phe Val Gly Thr Gly Met Glu Gln Arg Ala Ala Tyr Asp Ala Gly  
50 55 60  
Asp Val Ile Val Ala Ser Ala Thr Gly Val Val Glu Thr Val Ser Ala  
65 70 75 80  
Gly Phe Ile Thr Ile Met Asp Asp Glu Gly Gln Arg His Thr Tyr Leu  
85 90 95  
Leu Arg Lys Phe Glu Arg Thr Asn Gln Gly Thr Cys Tyr Asn Gln Lys  
100 105 110  
Pro Leu Leu Thr Arg  
115

<210> 1183  
<211> 432  
<212> DNA  
<213> Homo sapiens

<400> 1183  
gatccttctg ggcgctggtc caagcgctg gtgaggccgt cctctcctgc agaaccccg  
60  
cctcttcgcc cctgcccgt cacctgttct gtctgtctca cctcctccag gaagcctgcc  
120  
tggccttctc catgctgatg ggcgtggccc ttgtccctgc agccatgcat tgacctccgt  
180  
ggctcctgga ggccaggcca cgtcctcatc ccctctgggt gaggtagagg cacagcctgg  
240  
gtgcgtgggg ccgtggcggc tccgaggcgc caccgctgtg tcctctcatg agtgggtgcc  
300  
gtccaggtct gtctgggct ggctgcgagg aggaggttgg cctcgcgcgg ccatgtgcgt  
360  
gacagtggag acatcgccag cctcctgctt gcacagctga cggcagcccc tctctctcca  
420  
gccatgtccc ca  
432

<210> 1184  
<211> 141  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1184

Met Ala Gly Glu Arg Gly Ala Ala Val Ser Cys Ala Ser Arg Arg Leu  
 1 5 10 15  
 Ala Met Ser Pro Leu Ser Arg Thr Trp Pro Arg Glu Ala Asn Leu Leu  
 20 25 30  
 Leu Ala Ala Ser Pro Gly Gln Thr Trp Thr Ala Pro Thr His Glu Arg  
 35 40 45  
 Thr Gln Arg Trp Arg Leu Gly Ala Ala Thr Ala Pro Arg Thr Gln Ala  
 50 55 60  
 Val Pro Leu Thr His Pro Glu Gly Met Arg Thr Trp Pro Gly Leu Gln  
 65 70 75 80  
 Glu Pro Arg Arg Ser Met His Gly Cys Arg Asp Lys Gly His Ala His  
 85 90 95  
 Gln His Gly Glu Gly Gln Ala Gly Phe Leu Glu Glu Val Ser Arg Thr  
 100 105 110  
 Glu Gln Val Ser Gly Gln Gly Arg Arg Gly Arg Gly Ser Ala Gly Glu  
 115 120 125  
 Asp Gly Leu Thr Thr Arg Leu Asp Gln Arg Pro Glu Gly  
 130 135 140

&lt;210&gt; 1185

&lt;211&gt; 423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1185

accggtgaat ttggccttaa cagcgatgga actcctggcc catccttatga acctggcatg  
 60  
 gaattacgcg gcaaatatgt attgttgggt gaagggtgtac ggggctctct atctaaacaa  
 120  
 gtcataata aataccaatt atccgagggt catgaaccac aaaagttcgg ccttggctta  
 180  
 aaagaaattt gggaaataga cccagaaaaa cacaagaag gcagagtcag tcataccatg  
 240  
 ggctggccat taaatggcaa tgctggcggc gggtctttta tttatcatgc agaaaacaat  
 300  
 caagtcttta tcggctttgt ggtgcatctt aattacgcca acccttacct atccccttac  
 360  
 caagaatttc aacgctttaa acaccatccg attatcgcg agctattaac tggcggtaaa  
 420  
 cgc  
 423

&lt;210&gt; 1186

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1186

Thr Gly Glu Phe Gly Leu Asn Ser Asp Gly Thr Pro Gly Pro Ser Tyr  
 1 5 10 15  
 Glu Pro Gly Met Glu Leu Arg Gly Lys Tyr Val Leu Leu Gly Glu Gly  
 20 25 30  
 Val Arg Gly Ser Leu Ser Lys Gln Val Ile Asn Lys Tyr Gln Leu Ser

```

      35              40              45
Glu Gly His Glu Pro Gln Lys Phe Gly Leu Gly Leu Lys Glu Ile Trp
  50              55              60
Glu Ile Asp Pro Glu Lys His Lys Glu Gly Arg Val Ser His Thr Met
  65              70              75              80
Gly Trp Pro Leu Asn Gly Asn Ala Gly Gly Gly Ser Phe Ile Tyr His
      85              90              95
Ala Glu Asn Asn Gln Val Phe Ile Gly Phe Val Val His Leu Asn Tyr
      100              105              110
Ala Asn Pro Tyr Leu Ser Pro Tyr Gln Glu Phe Gln Arg Phe Lys His
      115              120              125
His Pro Ile Ile Ala Glu Leu Leu Thr Gly Gly Lys Arg
      130              135              140

```

<210> 1187  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

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<400> 1187
acgcgtgctg gtgagtttaa attgaatgct gatggtaatt tggtagacgaa ttcaggggct
  60
aagggtccagg gctataatgc aatagatggc atagtcgggtg ggaacttaga agatatggta
  120
gtacccactg ctcgaatttc tctcaagca acatcaagtg ttgatttaaa agtgaatctt
  180
aattccgaag gtgaggatgt gccgccttat attcgagcgg actttgatcc agccaatcca
  240
gatacttatg actatactca gacccaaacg gttgcggatg ggagtggtaa taatcattta
  300
attagttatt actatgctaa aagtgatgta gcaaatacct atcaggttta tgccacggta
  360
gatgggaagt cgactgatga taccggt
  387

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<210> 1188  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

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<400> 1188
Thr Arg Ala Gly Glu Phe Lys Leu Asn Ala Asp Gly Asn Leu Val Thr
  1              5              10              15
Asn Ser Gly Ala Lys Val Gln Gly Tyr Asn Ala Ile Asp Gly Ile Val
      20              25              30
Gly Gly Asn Leu Glu Asp Met Val Val Pro Thr Ala Arg Ile Ser Pro
      35              40              45
Gln Ala Thr Ser Ser Val Asp Leu Lys Val Asn Leu Asn Ser Glu Gly
      50              55              60
Glu Asp Val Pro Pro Tyr Ile Arg Ala Asp Phe Asp Pro Ala Asn Pro
  65              70              75              80
Asp Thr Tyr Asp Tyr Thr Gln Thr Gln Thr Val Ala Asp Gly Ser Gly
      85              90              95
Asn Asn His Leu Ile Ser Tyr Tyr Tyr Ala Lys Ser Asp Val Ala Asn

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100 105 110  
 Thr Tyr Gln Val Tyr Ala Thr Val Asp Gly Lys Ser Thr Asp Thr  
 115 120 125  
 Gly

<210> 1189  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1189  
 tcgatacgccg accgcccggg ccttgccccc ggcatacgatg gtggcctggt ggccagcacc  
 60  
 ctgggtgctg gtttcattgg cggcatcggt gcaggttttc tggccgggta cagcgccaag  
 120  
 gccattgccc gctggggcacg gctgcccagc agcctggatg cgctcaaacc gattctgac  
 180  
 atttcgctgc tggccagcct gttcactggg ttggtgatga tctacgtggt cggccagccg  
 240  
 gtggcgggcca tgctcggagg cctgacacac tttctcgaca gcatgggtac caccaacgcc  
 300  
 attctcctgg gcntgttgct cggcggctag  
 330

<210> 1190  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 1190  
 Ser Ile Ala Asp Arg Pro Gly Leu Ala Pro Gly Met Ile Gly Gly Leu  
 1 5 10 15  
 Leu Ala Ser Thr Leu Gly Ala Gly Phe Ile Gly Gly Ile Val Ala Gly  
 20 25 30  
 Phe Leu Ala Gly Tyr Ser Ala Lys Ala Ile Ala Arg Trp Ala Arg Leu  
 35 40 45  
 Pro Ser Ser Leu Asp Ala Leu Lys Pro Ile Leu Ile Ile Ser Leu Leu  
 50 55 60  
 Ala Ser Leu Phe Thr Gly Leu Val Met Ile Tyr Val Val Gly Gln Pro  
 65 70 75 80  
 Val Ala Ala Met Leu Gly Gly Leu Thr His Phe Leu Asp Ser Met Gly  
 85 90 95  
 Thr Thr Asn Ala Ile Leu Leu Gly Xaa Leu Leu Gly Gly  
 100 105

<210> 1191  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

<400> 1191  
 cggccgacga tgtgcggtga gcaagagatt tggagagcca tgatgacgtc agcagacaaa  
 60

gcagggacta acggacagac catgcagaca ccgccggtgg tgtcgccgca ggactgggag  
 120  
 gcagcccgtc agcaactgct cgtgaaggaa aaggcgcata cccgtgcccc cgacgcactc  
 180  
 gccgccgaac ggaggcgcat gccgtggatg gaagtgacaa aaacctacgc attcgaggcg  
 240  
 ccctcggggca aggccagtct gctcgatctg ttccagggcc ggaagcagct gatcctgtac  
 300  
 cgggccttct tcgagccggg cgtgttcggc tggcccagacc atgcctgccg c  
 351

<210> 1192

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1192

Met	Cys	Gly	Glu	Gln	Glu	Ile	Trp	Arg	Ala	Met	Met	Thr	Ser	Ala	Asp
1				5					10					15	
Lys	Ala	Gly	Thr	Asn	Gly	Gln	Thr	Met	Gln	Thr	Pro	Pro	Val	Val	Ser
			20					25					30		
Pro	Gln	Asp	Trp	Glu	Ala	Ala	Arg	Gln	Gln	Leu	Leu	Val	Lys	Glu	Lys
		35					40					45			
Ala	His	Thr	Arg	Ala	Arg	Asp	Ala	Leu	Ala	Ala	Glu	Arg	Arg	Arg	Met
	50					55					60				
Pro	Trp	Met	Glu	Val	Thr	Lys	Thr	Tyr	Ala	Phe	Glu	Ala	Pro	Ser	Gly
65					70				75					80	
Lys	Ala	Ser	Leu	Leu	Asp	Leu	Phe	Gln	Gly	Arg	Lys	Gln	Leu	Ile	Leu
			85					90					95		
Tyr	Arg	Ala	Phe	Phe	Glu	Pro	Gly	Val	Phe	Gly	Trp	Pro	Asp	His	Ala
			100					105					110		

Cys Arg

<210> 1193

<211> 722

<212> DNA

<213> Homo sapiens

<400> 1193

ggatcccagc ctccagatcc catctttag tagctctcttctc tctacactna ggttgctccc  
 60  
 cgacttagga cggccagttt gtactcagtg ttgctctctt tatggcagag cctctgcact  
 120  
 cccagcctcc tggccccttc tgtacatgat ttctcttggt gccactccat gcatttttct  
 180  
 tggctcagga cttagtgggc ctccatggga cttgggtacct ctacttggtc ccttctggaa  
 240  
 tctgtaactt tgtgttcccc accattcttt cctttatgaa ccgatgggtgc aacagcatga  
 300  
 ctacctgaaa ttcttagtca ctcccagctg ctttagtgga gggaaaatgc ccacagcaca  
 360  
 ggaaatagtc ctgcccttcg agagaggcca ggggatggga gcgtgtccag agaagggcga  
 420

tgggttgatg aagggtggcc acagcgcccc ggaggaaggg gccagaacgc tctctgttct  
 480  
 gttccatgag gaggattatg ttggtgtgtg tagtccccctg gttcagagtt gtccagaaat  
 540  
 agctcagtgt aaggaacaat tttccaaaga tcaaaagagc tgtctcaaga tagcagtgcg  
 600  
 ttcccagccc ctacaggtgt atacagcaca aaggaggga ccccttagtg tggtgtcac  
 660  
 agaggggaagt ggacgtcctg tggtttgacc ccaccagatg gctttagaga tctgggcccc  
 720  
 ag  
 722

<210> 1194  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1194  
 Met Val Gln Gln His Asp Tyr Leu Lys Phe Leu Val Thr Pro Ser Cys  
 1 5 10 15  
 Phe Ser Gly Gly Lys Met Pro Thr Ala Gln Glu Ile Val Leu Pro Phe  
 20 25 30  
 Glu Arg Gly Gln Gly Met Gly Ala Cys Pro Glu Lys Gly Asp Gly Leu  
 35 40 45  
 Met Lys Gly Gly His Ser Ala Arg Glu Glu Gly Ala Arg Thr Leu Ser  
 50 55 60  
 Val Leu Phe His Glu Glu Asp Tyr Val Gly Val Cys Ser Pro Leu Val  
 65 70 75 80  
 Gln Ser Cys Pro Glu Ile Ala Gln Cys Lys Glu Gln Phe Ser Lys Asp  
 85 90 95  
 Gln Lys Ser Cys Leu Lys Ile Ala Val Arg Ser Gln Pro Leu Gln Val  
 100 105 110  
 Tyr Thr Ala Gln Arg Glu Gly Pro Ser Val Ala Val Thr Glu Gly  
 115 120 125  
 Ser Gly Arg Pro Val Val  
 130

<210> 1195  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 1195  
 tctagagcat gatattccgc gggcgcggcc ggggtggactt tggttcgaga gtggaactaa  
 60  
 gtgagtaatg ggggcggcgc ggccagacgc gctcccagcc tcttggcgag agtgctgccc  
 120  
 ggtttcccgg gggcacggga gtgtgtctag gaggggaggc caggatcctt cctcgagtcc  
 180  
 tgtcctgaac aaaagaaaac gaggtgggtg gtgcttgaac ggccctgttt actctgcaga  
 240  
 tagccgaact ggtaggactc cggcgcgccc tatttatctt gattggctct gcctgaaggc  
 300

aagcgttaat cccgtccaac ctgtatcact gcgaagagct cgttcgggag cgcttttttg  
360

aaatgcagat tcttagcccc caccagatc t  
391

<210> 1196

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1196

Met	Gly	Ala	Ala	Arg	Pro	Asp	Ala	Leu	Pro	Ala	Ser	Trp	Arg	Glu	Cys
1				5					10					15	
Cys	Pro	Val	Ser	Arg	Gly	His	Gly	Ser	Val	Ser	Arg	Arg	Gly	Gly	Gln
			20					25					30		
Asp	Pro	Ser	Ser	Ser	Pro	Val	Leu	Asn	Lys	Arg	Lys	Arg	Gly	Gly	Trp
			35				40					45			
Cys	Leu	Asn	Gly	Pro	Val	Tyr	Ser	Ala	Asp	Ser	Arg	Thr	Gly	Arg	Thr
	50					55				60					
Pro	Ala	Arg	Pro	Ile	Tyr	Leu	Asp	Trp	Leu	Cys	Leu	Lys	Ala	Ser	Val
65				70					75					80	
Asn	Pro	Val	Gln	Pro	Val	Ser	Leu	Arg	Arg	Ala	Arg	Ser	Gly	Ala	Leu
			85					90						95	
Phe	Gly	Asn	Ala	Asp	Ser										
															100

<210> 1197

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1197

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60  
tggcagcaag atgaaatcat cgtaaactga caaggggatg aaccctttct gcctgttgca  
120  
cttattcatg ccacgggttaa agcgtagacc gatgatgctg aatctgaaat ggccacgatt  
180  
gcctgtgcga ttgataacgt agcagagctg ttttaaccaa atgtagttaa agtcgtttgt  
240  
gatgaaaaac agcgcgcctt gtattttcagt cgtgcgccta tgccatggga ccgtaatggt  
300  
tttatggaaa aaacagacga tcaagcgtaa ccagcggatt ttctgcgtt gcgtcatatt  
360  
ggtcggtatg tttaccgcac gacatn  
386

<210> 1198

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1198

Thr Arg Asp Asp His Glu Asn Gly Thr Glu Arg Leu Ala Glu Val Ala

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1           5           10           15
Ser Val Met Gly Trp Gln Gln Asp Glu Ile Ile Val Asn Val Gln Gly
20           25           30
Asp Glu Pro Phe Leu Pro Val Ala Leu Ile His Ala Thr Val Lys Ala
35           40           45
Leu Ala Asp Asp Ala Glu Ser Glu Met Ala Thr Ile Ala Cys Ala Ile
50           55           60
Asp Asn Val Ala Glu Leu Phe Asn Pro Asn Val Val Lys Val Val Cys
65           70           75           80
Asp Glu Lys Gln Arg Ala Leu Tyr Phe Ser Arg Ala Pro Met Pro Trp
85           90           95
Asp Arg Asn Gly Phe Met Glu Lys Thr Asp Asp Gln Ala Leu Pro Ala
100          105          110
Asp Phe Pro Ala Leu Arg His Ile Gly Pro Tyr Val Tyr Arg Thr Thr
115          120          125

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&lt;210&gt; 1199

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1199

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acgcgttcag cgatcatgtac agccccgggc cgggtcaattt gatgggcctc aatgccgggc
60
ttacgggcaa attgcgtcgc tccagcgggt tctacatcgg cgtgggggtgc gcgatgctgc
120
tgatggtcgg gctgggttggg ctcaccggcg aagcgatcat ctcccaggcg gcgctgccgt
180
atatttcttt gattggcggg gtgtacacgc tgtacctcgc ctaccagggtg ttcaccgcac
240
gtaccgaagt ggatgacgcc ccaagcgcgc ctgccaaagac cttgaccttc tggaatggcc
300
tggtgatcca gttgctcc
318

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&lt;210&gt; 1200

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1200

```

Met Tyr Ser Pro Gly Pro Val Asn Leu Met Gly Leu Asn Ala Gly Leu
1           5           10           15
Thr Gly Lys Leu Arg Arg Ser Ser Gly Phe Tyr Ile Gly Val Gly Cys
20           25           30
Ala Met Leu Leu Met Val Gly Leu Val Gly Leu Thr Gly Glu Ala Ile
35           40           45
Ile Ser Gln Ala Ala Leu Pro Tyr Ile Ser Leu Ile Gly Gly Val Tyr
50           55           60
Thr Leu Tyr Leu Ala Tyr Gln Val Phe Thr Ala Arg Thr Glu Val Asp
65           70           75           80
Asp Ala Pro Ser Ala Pro Ala Lys Thr Leu Thr Phe Trp Asn Gly Leu
85           90           95
Val Ile Gln Leu Leu

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100

<210> 1201  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 1201  
 gtcgacgcac aactccagct ggctcgctccc aacagcccga acatccccct ttatcgcgat  
 60  
 atgatactca ccgtgctgcg catggccaag gatgaccgca accgttggaa tgcaaaaatc  
 120  
 acgctgcagg cgatccgcga gctggataac gccttcgcgc tgctggaaca gttcaagggc  
 180  
 cgccgcaagg tcacggtggt tggctcggcg cgcacgccgg tcgaaagccc gctgtacgcc  
 240  
 ttggcaaggg aagtcggcac gctgctggcg caatccgacc tgatggtgat caccggcggt  
 300  
 ggcggcggca tcatggccgc tgcccacgag ggcgcaaggt ctggaacaca gcctgggggt  
 360

<210> 1202  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 1202  
 Val Asp Ala Gln Leu Gln Leu Val Ala Pro Asn Ser Pro Asn Ile Pro  
 1 5 10 15  
 Leu Tyr Arg Asp Met Ile Leu Thr Val Leu Arg Met Ala Lys Asp Asp  
 20 25 30  
 Arg Asn Arg Trp Asn Ala Lys Ile Thr Leu Gln Ala Ile Arg Glu Leu  
 35 40 45  
 Asp Asn Ala Phe Arg Val Leu Glu Gln Phe Lys Gly Arg Arg Lys Val  
 50 55 60  
 Thr Val Phe Gly Ser Ala Arg Thr Pro Val Glu Ser Pro Leu Tyr Ala  
 65 70 75 80  
 Leu Ala Arg Glu Val Gly Thr Leu Leu Ala Gln Ser Asp Leu Met Val  
 85 90 95  
 Ile Thr Gly Gly Gly Gly Gly Ile Met Ala Ala Ala His Glu Gly Ala  
 100 105 110  
 Arg Ser Gly Thr Gln Pro Gly Gly  
 115 120

<210> 1203  
 <211> 477  
 <212> DNA  
 <213> Homo sapiens

<400> 1203  
 ccgatatgg cagctcgact tcattcgacc agagttcttg gaacatttgg ctatcatgca  
 60  
 cctgagtatg caatgactgg acaacttagc tctaagagtg acgtttacag ttttggagtt  
 120

ggtcttctgg agctcctgac tggaagaaag cctgtggatc ttccattacc aagaggacag  
 180  
 caaagtcttg tgacatgggc aactccacgg ctttgtgaag ataaagttag gcaatgcggt  
 240  
 gattcaagac ttggagtaga atatcctcct aaatccgttg caaagtttgc agctgttgct  
 300  
 gcactgtgtg tgcaatatga agctgacttt cgacccaaca tgagcatcgt ggtgaaggcg  
 360  
 cttcagcccc tgctgaatgc acgtgcatcc aacaaccctg gatgaatgaa tgaatgactg  
 420  
 ccgttgcttt tccctgacga gagtatctga atcagacaat catgtagcat tgaattc  
 477

<210> 1204  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1204  
 Pro Asp Met Ala Ala Arg Leu His Ser Thr Arg Val Leu Gly Thr Phe  
 1 5 10 15  
 Gly Tyr His Ala Pro Glu Tyr Ala Met Thr Gly Gln Leu Ser Ser Lys  
 20 25 30  
 Ser Asp Val Tyr Ser Phe Gly Val Gly Leu Leu Glu Leu Leu Thr Gly  
 35 40 45  
 Arg Lys Pro Val Asp Leu Pro Leu Pro Arg Gly Gln Gln Ser Leu Val  
 50 55 60  
 Thr Trp Ala Thr Pro Arg Leu Cys Glu Asp Lys Val Arg Gln Cys Val  
 65 70 75 80  
 Asp Ser Arg Leu Gly Val Glu Tyr Pro Pro Lys Ser Val Ala Lys Phe  
 85 90 95  
 Ala Ala Val Ala Ala Leu Cys Val Gln Tyr Glu Ala Asp Phe Arg Pro  
 100 105 110  
 Asn Met Ser Ile Val Val Lys Ala Leu Gln Pro Leu Leu Asn Ala Arg  
 115 120 125  
 Ala Ser Asn Asn Pro Gly  
 130

<210> 1205  
 <211> 407  
 <212> DNA  
 <213> Homo sapiens

<400> 1205  
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 60  
 tgtgcacagg gaaacactag ctaccgtgca gcaggaaatg atgggagaaa tcagccatgg  
 120  
 taacaagaac caagccatcc tggacacaga cggccgggggt tgtgcgaacg gaacgttagt  
 180  
 ctatcaatgt gttgcggaac gattcaaggg atgctggccc ccccatcac ttgccaatc  
 240  
 aagatgtgga gggaatctgt ctgcgcagaa cctggatctc gtggttgtag gacgttgacc  
 300

ccttctcgct cggacgcgcg tcatgctccg ccacgtcgct gagcgagtga caaggtatcc  
360

tgggaccatg cgtatggttt caactgaagc gctggcgaat cgtaaan  
407

<210> 1206

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1206

Met	Met	Gly	Glu	Ile	Ser	His	Gly	Asn	Lys	Asn	Gln	Ala	Ile	Leu	Asp
1				5				10						15	
Thr	Asp	Gly	Arg	Gly	Cys	Ala	Asn	Gly	Thr	Leu	Val	Tyr	Gln	Cys	Val
		20						25					30		
Ala	Glu	Arg	Phe	Lys	Gly	Cys	Trp	Pro	Pro	Pro	Ser	Leu	Ala	Gln	Ser
		35					40					45			
Arg	Cys	Gly	Gly	Asn	Leu	Ser	Ala	Gln	Asn	Leu	Asp	Leu	Val	Val	Val
	50				55					60					
Arg	Arg	Cys	Pro	Leu	Leu	Ala	Arg	Thr	Pro	Leu	Met	Leu	Arg	His	Val
65				70						75				80	
Ala	Glu	Arg	Val	Thr	Arg	Tyr	Pro	Gly	Thr	Met	Arg	Met	Val	Ser	Thr
			85					90						95	
Glu	Ala	Leu	Ala	Asn	Arg	Lys									
							100								

<210> 1207

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1207

gctagcatgt cacttttttc ttcagtagat ggcactggag agacattgca ggatgaagag  
60  
gcttgcccttc attcctatgt gctttcccgt ccttgcttct ccagccatgt gtgggacaac  
120  
caggggtgct caccacctag tgagtttcag ggacactcca catgtcccag caagtcttat  
180  
cagcatctta gctggcttct caacaagact cagtggcacc cctgtggatg tctcccatca  
240  
agttttcatta gtgccccagg gggagactcc cagaaagttt cagcagcacc ac  
292

<210> 1208

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1208

Met	Ser	Leu	Phe	Ser	Ser	Val	Asp	Gly	Thr	Gly	Glu	Thr	Leu	Gln	Asp
1				5				10						15	
Glu	Glu	Ala	Cys	Leu	His	Ser	Tyr	Val	Leu	Ser	Arg	Pro	Cys	Phe	Ser
		20						25					30		
Ser	His	Val	Trp	Asp	Asn	Gln	Gly	Cys	Ser	Pro	Pro	Ser	Glu	Phe	Gln

	35					40					45								
Gly	His	Ser	Thr	Cys	Pro	Ser	Lys	Ser	Tyr	Gln	His	Leu	Ser	Trp	Leu				
	50					55					60								
Leu	Asn	Lys	Thr	Gln	Trp	His	Pro	Cys	Gly	Cys	Leu	Pro	Ser	Ser	Phe				
65					70					75					80				
Ile	Ser	Ala	Pro	Gly	Gly	Asp	Ser	Gln	Lys	Val	Ser	Ala	Ala	Pro					
				85					90					95					

<210> 1209  
 <211> 431  
 <212> DNA  
 <213> Homo sapiens

<400> 1209  
 ttggttccta taatggcggt agcttacatt tttgctggta tcattatattt gttaatgcat  
 60  
 gccagtgaag ttattccggc aatatcaact attgtcgagt atgcctttac gccagcttct  
 120  
 gcgcagggtg gttttgctgg tgcaacggta tggatggcga ttcgttttgg tgttgcccgt  
 180  
 ggtgtatttt caaatgagggc aggttttaggt tcggcgccga tcgctcatgc cagtgcacaa  
 240  
 actaatgaac cggttcgcca agggttgggtg gcgatgttag gtactttcct tgatacactt  
 300  
 attatttgta caggttttagt gattgttatt tctggtgctt ggacagaagg attgtcgggt  
 360  
 gctgcgttaa catctgctgc atttaatctg gcgttacctg gttggggggg atacttagtc  
 420  
 gctatcagct g  
 431

<210> 1210  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1210  
 Leu Val Pro Ile Met Ala Val Ala Tyr Ile Phe Ala Gly Ile Ile Ile  
 1 5 10 15  
 Leu Leu Met His Ala Ser Glu Val Ile Pro Ala Ile Ser Thr Ile Val  
 20 25 30  
 Glu Tyr Ala Phe Thr Pro Ala Ser Ala Gln Gly Gly Phe Ala Gly Ala  
 35 40 45  
 Thr Val Trp Met Ala Ile Arg Phe Gly Val Ala Arg Gly Val Phe Ser  
 50 55 60  
 Asn Glu Ala Gly Leu Gly Ser Ala Pro Ile Ala His Ala Ser Ala Gln  
 65 70 75 80  
 Thr Asn Glu Pro Val Arg Gln Gly Leu Val Ala Met Leu Gly Thr Phe  
 85 90 95  
 Leu Asp Thr Leu Ile Ile Cys Thr Gly Leu Val Ile Val Ile Ser Gly  
 100 105 110  
 Ala Trp Thr Glu Gly Leu Ser Gly Ala Ala Leu Thr Ser Ala Ala Phe  
 115 120 125  
 Asn Leu Ala Leu Pro Gly Trp Gly Gly Tyr Leu Val Ala Ile Ser

130

135

140

&lt;210&gt; 1211

&lt;211&gt; 480

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1211

gaggagggac gagaggctgg tgagatggag tccagcacc tgcaggagag ccccagggcc  
60  
agagccgaag ctgtgcttct ccatgagatg gatgaagatg atctggccaa tgccttgatc  
120  
tggcctgaga ttcaacagga gctgaaaatc attgaatctg aggaggagct ctcctcgctg  
180  
ccacctcctg ctctgaagac cagcccaatt cagcctattc tcgagtcgag tctggggccc  
240  
tttatccct cagagcctcc tgggagcttg ccttggtggt ccttcctgc tccagtctcc  
300  
accctctgg aggtgtggac tagggatcca gccaatcaga gcacacaggg ggcttcaca  
360  
gcagccagca gagagaagcc ggaacctgag cagggcctgc acccagacct cgccagcctg  
420  
gctcctctgg aaatagttcc ttttgagaag gcatctccag aggctggagt gtgctcgca  
480

&lt;210&gt; 1212

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1212

Glu	Glu	Gly	Arg	Glu	Ala	Gly	Glu	Met	Glu	Ser	Ser	Thr	Leu	Gln	Glu
1				5					10					15	
Ser	Pro	Arg	Ala	Arg	Ala	Glu	Ala	Val	Leu	Leu	His	Glu	Met	Asp	Glu
			20					25					30		
Asp	Asp	Leu	Ala	Asn	Ala	Leu	Ile	Trp	Pro	Glu	Ile	Gln	Gln	Glu	Leu
		35				40						45			
Lys	Ile	Ile	Glu	Ser	Glu	Glu	Glu	Leu	Ser	Ser	Leu	Pro	Pro	Pro	Ala
	50					55					60				
Leu	Lys	Thr	Ser	Pro	Ile	Gln	Pro	Ile	Leu	Glu	Ser	Ser	Leu	Gly	Pro
65					70					75				80	
Phe	Ile	Pro	Ser	Glu	Pro	Pro	Gly	Ser	Leu	Pro	Cys	Gly	Ser	Phe	Pro
				85					90					95	
Ala	Pro	Val	Ser	Thr	Pro	Leu	Glu	Val	Trp	Thr	Arg	Asp	Pro	Ala	Asn
				100				105					110		
Gln	Ser	Thr	Gln	Gly	Ala	Ser	Thr	Ala	Ala	Ser	Arg	Glu	Lys	Pro	Glu
		115				120						125			
Pro	Glu	Gln	Gly	Leu	His	Pro	Asp	Leu	Ala	Ser	Leu	Ala	Pro	Leu	Glu
	130					135					140				
Ile	Val	Pro	Phe	Glu	Lys	Ala	Ser	Pro	Glu	Ala	Gly	Val	Cys	Ser	Arg
145					150					155					160

&lt;210&gt; 1213

&lt;211&gt; 1141

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1213

nntcatgatg gcggcctggt gtgtgggtat gtccacgatg ggcgcgtcac gcgtgtcgcc  
60  
cgtgatgctc aggggcgggt taccgggata gaggggccat cagggcgttg gagttacggc  
120  
tacaacgagg ctgggtcact catcagcgcg acggggcccc gcacacaaca taactggact  
180  
cacgacgcct atggccggct caccagccac gccacatccg gaaccgacac caccttcgcc  
240  
tgggaccagg aaggccacct ggcgcagacg tgtacgcgtg cacacgggca tgccactgcc  
300  
accagtatc gctatgacgc agcgggacgg cgcgtcagtg cgaccagctc agacggccag  
360  
gaggagcgtt actcctggga tggacgggggt tggctgtctg acatcaccac cgacgccacg  
420  
accgtatcga ctcacgtcga tgcattgggg cgcgccagtc gtatcaccac taagggccag  
480  
caggtagcag tggactggga cctcgtgacc ggagcccca cctcgattga tggtcgtcct  
540  
gtgcttcccc tgcccgagg acgcatcctc ggcgccacac ccatcggcga taccaaccta  
600  
tggcgtgagg tcatgcccac cgaccctgac aacccttacc agcccgccac ggccactatt  
660  
gagggtgtcc ccgagacgat caggatggcc gggaacacgc tagtggttga tggtcaccct  
720  
tgggtgggggc gcgcctctac gacccaacta ccaccacctt cttgtctcct gacccgtaa  
780  
ccccgcccgc cggcgcgcta tgggccaaca acccctacga ctacgccaac aacaaccccc  
840  
tcaccctcac cgatcctctc gggaccacc ccgtcaccga cgaccaactg gcactcctca  
900  
cccaccccat cggcacactc gcacactacg tcgccaactc cgtcagcaca ctcgtgcac  
960  
acatcacga tccgatcagc cactggtggg ccaccacaa agaccggatc ctctccggg  
1020  
acttctgat cgggtgccggc ctcgtcatcg gcggtatcgc gtagcggcca cgggcgtagg  
1080  
aggaccctc ctagccggg ccatttccgg gggactcatc tcaggcggct tttccgctag  
1140  
c  
1141

&lt;210&gt; 1214

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1214

Xaa	His	Asp	Gly	Gly	Leu	Val	Cys	Gly	Tyr	Val	His	Asp	Gly	Arg	Val
1				5					10					15	
Thr	Arg	Val	Ala	Arg	Asp	Ala	Gln	Gly	Arg	Val	Thr	Gly	Ile	Glu	Gly

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<210> 1215
<211> 317
<212> DNA
<213> Homo sapiens
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<210> 1216
<211> 102
<212> PRT
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<213> Homo sapiens

<400> 1216

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Met Tyr Cys Gly Glu Pro Thr Leu Phe Ser Thr Met Asn Ala Ser Thr
 1           5           10           15
Arg Pro Arg Asp Ser Asp Gly Ser Ser Pro Pro Lys Val Val Pro Arg
      20           25           30
Tyr Phe Phe His Ala Pro Thr Pro Ala Thr Ala Arg Thr Pro Pro Pro
      35           40           45
Arg Ser Gly Val Leu Pro Val Met Ala Gly Leu Thr Pro Gly Ala Val
      50           55           60
Pro Ile Lys Gly Lys Gln Val Gly Ile Pro Pro Asp Ala Gly Cys Arg
65           70           75           80
His Ala His Val Val His Pro Gln Val Asp Arg Ala His Arg Arg Leu
      85           90           95
Asp Leu Gln Arg Thr Arg
      100

```

<210> 1217

<211> 548

<212> DNA

<213> Homo sapiens

<400> 1217

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naccgcgtggg ttgacgcgct attaaacgat aagagcaaaa aaacatttcc tcatttatta
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cgttgtcggg tgaatgatgt ttctggtgat agtcagtgga tagagatgcg aggcagtgtg
120
acagggttggg acagccgtca tcgagctcag atggtgagag ggacattcga gcgtattaac
180
catcttattg acgetgaaaa tgaattaatt gcggcccgtg aagatgctca gcgacgagag
240
cttattttat cggctttgct aaataatatt ccagaccctg tttggtctaa agatgaaagc
300
ggtcggttatt tggactgtaa ccatgcgttt tgtctgttta atggtttaga gcagagtgat
360
gttcaggggc aaaaagacag tgaattaaac ttagataata atggtcaata ttatcaagat
420
atgggcggtg aggtatttagc gcgagggggag atttttcatg aacattgttg gggtagcct
480
gcagatggaa gtgacaaccg cttgtttgaa gtatatcgag tccctatcaa agagcctacc
540
gtgaattc
548

```

<210> 1218

<211> 182

<212> PRT

<213> Homo sapiens

<400> 1218

```

Xaa Ala Trp Val Asp Ala Leu Leu Asn Asp Lys Ser Lys Lys Thr Phe
 1           5           10           15
Pro His Leu Leu Arg Cys Arg Val Asn Asp Val Ser Gly Asp Ser Gln

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<400> 1220															
Met	Glu	Lys	Trp	Val	His	Gln	Lys	Met	Met	Arg	Val	Pro	Pro	Glu	Lys
1				5					10					15	
Ile	Thr	Lys	Thr	Ile	Leu	Leu	Val	Phe	Ser	Ser	Ser	Thr	Gly	Leu	Trp
			20					25					30		
Lys	Phe	Pro	Asp	His	Pro	Pro	Ser	Phe	Gln	Thr	Lys	Thr	Gly	Met	Ala
		35					40					45			
Leu	Asn	His	His	Pro	Lys	Ala	Arg	Gly	Val	Leu	Lys	Pro	Lys	Pro	Ser

50		55		60											
Gly	Ala	Gly	Ala	Ser	Leu	Phe	Arg	Arg	Ala	Gln	Pro	Cys	Ser	Leu	Cys
65			70					75				80			
Pro	Phe	Gly	Lys	Asp	Arg	Glu	Leu	Glu	Leu	Trp	Val	Gly	Gly	Gly	
			85					90					95		

<210> 1221  
 <211> 569  
 <212> DNA  
 <213> Homo sapiens

<400> 1221  
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 gcccgctccag gaaagctgca cctcagagaa gcagtttcct tccttacctg ggaagtttct  
 120  
 tctgtaacac gttaagcccc acaggtaagg cctgatcccc cctggacggc tccccctctcc  
 180  
 agtgttccca gtctggaggt antcttttct aagccatcct ctcagaatgt gatgggtacc  
 240  
 aggatgcaca cccggtggcc ctgtggtgtg aggcctcagc aaacacggtc agaagatgaa  
 300  
 cacacagaga cccgcccgtc ggaaggagag gagggagcgg atacggaggc ccacgtgcc  
 360  
 gaaggggtccc ttgcagtggg gtggttatgt gcctgcaatc ccagagtgtc ctcgaaggac  
 420  
 ctcagatcta acgagctcag ccggcagctg cacgtgggac cagccctctg agcttcactt  
 480  
 gttttcctct gtgccatcag aaaccaatac gaagataaaa tgggaaaaaa aaaaatccca  
 540  
 ttcacggcac agcctgccga gaaacgcgt  
 569

<210> 1222  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

1	5	10	15												
Met	Asn	Thr	Gln	Arg	Pro	Ala	Arg	Arg	Lys	Glu	Arg	Arg	Glu	Arg	Ile
Arg	Arg	Pro	Thr	Cys	Gln	Lys	Gly	Pro	Leu	Gln	Trp	Cys	Gly	Tyr	Val
	20				25				30						
Pro	Ala	Ile	Pro	Glu	Cys	Pro	Arg	Arg	Thr	Ser	Asp	Leu	Thr	Ser	Ser
	35					40				45					
Ala	Gly	Ser	Cys	Thr	Trp	Asp	Gln	Pro	Ser	Glu	Leu	His	Leu	Phe	Ser
	50				55			60							
Ser	Val	Pro	Ser	Glu	Thr	Asn	Thr	Lys	Ile	Lys	Trp	Glu	Lys	Lys	Lys
65			70					75					80		
Ser	His	Ser	Arg	His	Ser	Leu	Pro	Arg	Asn	Ala					
			85					90							

<210> 1223  
 <211> 450

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1223

aagcttgctc aggctagtgc cgacgctgct gctctcaaac tcgtcgatgc ccaccggttg  
60  
ttgtgcgctc accgagaggg gccatacggg gtagacgagt ggtctcagcg catggttact  
120  
gtactttcag atgtgttgcc tgggtgtggc caaggccggt gggttctcgg cgaaactgca  
180  
atagtaacgc ataacctcgc acaattggga gtcaataacg gtgattgcgg ggtcatcggt  
240  
gaaacaaggc ccgtccccac gatagctcta cggggaccgc gtggagtccc cagacggttg  
300  
ccctgttccc tcatcccatc gctgcaaccc ttacaggcga tgacgattca caaagcgcag  
360  
ggcagccaat tcacggacgt aacggtgggc ctgccaccac ccgactcgcc cctcctctct  
420  
cgtgagttgc tctataccgc catcacgcgt  
450

&lt;210&gt; 1224

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1224

Lys	Leu	Ala	Gln	Ala	Ser	Ala	Asp	Ala	Ala	Ala	Leu	Lys	Leu	Val	Asp
1			5					10						15	
Ala	His	Arg	Leu	Leu	Cys	Ala	His	Arg	Glu	Gly	Pro	Tyr	Gly	Val	Asp
			20					25						30	
Glu	Trp	Ser	Gln	Arg	Met	Val	Thr	Val	Leu	Ser	Asp	Val	Leu	Pro	Gly
			35					40						45	
Val	Gly	Gln	Gly	Arg	Trp	Val	Leu	Gly	Glu	Thr	Ala	Ile	Val	Thr	His
			50					55						60	
Asn	Leu	Ala	Gln	Leu	Gly	Val	Asn	Asn	Gly	Asp	Cys	Gly	Val	Ile	Val
65						70				75				80	
Glu	Thr	Arg	Pro	Val	Pro	Thr	Ile	Ala	Leu	Pro	Gly	Pro	Gly	Gly	Val
				85					90					95	
Pro	Arg	Arg	Leu	Pro	Cys	Ser	Leu	Ile	Pro	Ser	Leu	Gln	Pro	Leu	Gln
			100					105						110	
Ala	Met	Thr	Ile	His	Lys	Ala	Gln	Gly	Ser	Gln	Phe	Thr	Asp	Val	Thr
			115					120						125	
Val	Val	Leu	Pro	Pro	Pro	Asp	Ser	Pro	Leu	Leu	Ser	Arg	Glu	Leu	Leu
			130				135					140			
Tyr	Thr	Ala	Ile	Thr	Arg										
145					150										

&lt;210&gt; 1225

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1225

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&lt;210&gt; 1226

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1226

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		20					25					30			
Lys	Thr	Gln	Ser	Pro	Pro	Lys	Val	Arg	Ser	Arg	Lys	Lys	Pro	Asp	Pro
		35				40					45				
Asp	Gln	Met	Lys	Gly	Pro	Gly	Lys	Phe	Leu	Glu	Lys	Arg	Leu	Leu	Lys
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Cys	Leu	Leu	Ala	Gly	Ile	Thr	Val	Ser	Trp	Gly	Phe	Ala	His	Ser	Ile
65				70				75					80		
Phe	Met	Ala	Phe	His	Asn	Asp	Pro	Arg	Thr	Asp	Pro	Glu	Lys	Pro	Arg
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Asp	Gln	Gly	Leu	Thr	Arg	Pro	Cys	His	His	Pro	Ile	Leu	Gln	Met	Arg
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Thr	Leu	Arg	Pro	Gly	Glu	Lys	Gly	Gly	Val	Asp	Gly	Thr	Arg	Trp	Pro
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&lt;210&gt; 1227

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1227

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 660  
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<210> 1228

<211> 97

<212> PRT

<213> Homo sapiens

<400> 1228

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			20				25					30			
Ile	Phe	Asp	Arg	Phe	Tyr	Arg	Val	Asp	Lys	Ala	Arg	Thr	Arg	Lys	Met
		35				40					45				
Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ala	Ile	Ser	Lys	Glu	Ile	Val	Glu	Ala
	50				55						60				
His	Asn	Gly	Arg	Ile	Trp	Ala	Asn	Ser	Val	Glu	Gly	Gln	Gly	Thr	Ser
65				70					75					80	
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Glu

<210> 1229

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1229

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gctcaggtaa ccaatccgcc cttggacgct atccgcgagg agcttgtcac ctccctgacg  
240  
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<210> 1230  
<211> 121  
<212> PRT  
<213> Homo sapiens

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Gly Thr Asp Thr Pro Leu Ala Val Leu Ser Asn Cys Pro Arg Met Leu  
35 40 45  
Trp Asp Tyr Phe Ser Gln Leu Phe Ala Gln Val Thr Asn Pro Pro Leu  
50 55 60  
Asp Ala Ile Arg Glu Glu Leu Val Thr Ser Leu Thr Gly Thr Ile Gly  
65 70 75 80  
Pro Glu Ala Asn Leu Leu Glu Pro Gly Pro Glu Ser Cys Arg Gln Val  
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Val Val Asn Tyr Pro Ile Ile Asp Ser Asp Gln Leu Ala Lys Ile Ile  
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<210> 1231  
<211> 351  
<212> DNA  
<213> Homo sapiens

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120  
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<213> Homo sapiens

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Leu Ser Asn Ser Ser Asp Glu Ser Leu Arg Arg Val Glu Lys Leu Ala
      35             40             45
Gly Arg Ser Ala Gln Phe Tyr Gln Gly Asp Ile Leu Asp Ala Glu Cys
      50             55             60
Leu His Arg Ile Phe Glu Ala His Asp Ile Ser Ala Val Ile His Phe
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Ala Gly Leu Lys Gly Val Gly Glu Ser Thr Arg
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<210> 1233

<211> 4982

<212> DNA

<213> Homo sapiens

<400> 1233

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240
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420
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480
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660
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960

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<210> 1234  
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 <212> PRT  
 <213> Homo sapiens

<400> 1234  
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 35 40 45  
 Val Gly Arg Asp Trp Asp Pro Ser Ser Thr Glu Gly Gly Ser Ser Pro  
 50 55 60  
 Leu Ile Cys Pro Asp Ser Ser Ala Arg Pro Arg Val Lys Ser Ser Tyr  
 65 70 75 80  
 Ser Met Glu Asn Ala Asn Lys Trp Ser Cys His Met Cys Thr Tyr Leu  
 85 90 95  
 Asn Trp Pro Arg Ala Ile Arg Cys Thr Gln Cys Leu Ser Gln Arg Arg  
 100 105 110  
 Thr Arg Ser Pro Thr Glu Ser Pro Gln Ser Ser Gly Ser Gly Ser Arg  
 115 120 125  
 Pro Val Ala Phe Ser Val Asp Pro Cys Glu Glu Tyr Asn Asp Arg Asn  
 130 135 140  
 Lys Leu Asn Thr Arg Thr Gln His Trp Thr Cys Ser Val Cys Thr Tyr

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Ser	Ile	Ile	Asn	Glu	Gln	Asp	Arg	Ala	Arg	Trp	Arg	Gly	Ser	Cys	Ser
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Ser	Gly	Asn	Ser	Gln	Arg	Arg	Ser	Pro	Pro	Ala	Thr	Lys	Arg	Asp	Ser
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Ser	Lys	Glu	Glu	Leu	Glu	Val	Asp	Phe	Lys	Lys	Leu	Lys	Gln	Ile	Lys
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Val	Val	Glu	Gly	Asp	Leu	Ala	Ala	Ile	Glu	Ala	Tyr	Lys	Ser	Ser	Gly
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	355				360					365					
Asp	Phe	Ala	Cys	Tyr	Phe	Leu	Thr	Asp	Leu	Val	Thr	Phe	Thr	Leu	Pro
	370				375					380					
Ala	Asp	Ile	Glu	Asp	Leu	Pro	Pro	Thr	Val	Gln	Glu	Lys	Leu	Phe	Asp
385				390					395				400		
Glu	Val	Leu	Asp	Arg	Asp	Val	Gln	Lys	Glu	Leu	Glu	Glu	Glu	Ser	Pro
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Ile	Ile	Asn	Trp	Ser	Leu	Glu	Leu	Ala	Thr	Arg	Leu	Asp	Ser	Arg	Leu
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Tyr	Ala	Leu	Trp	Asn	Arg	Thr	Ala	Gly	Asp	Cys	Leu	Leu	Asp	Ser	Val
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465				470						475				480	
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Leu	Ala	Ser	Gln	Pro	Gly	Ala	Ser	Leu	Glu	Gln	Thr	His	Ile	Phe	Val
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Val	Tyr	Leu	Pro	Leu	Leu	Trp	Glu	Gln	Ser	Phe	Cys	Trp	Lys	Ser	Pro
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Ile	Ala	Leu	Gly	Tyr	Thr	Arg	Gly	His	Phe	Ser	Ala	Leu	Val	Ala	Met

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 Asp Asp Asp Val Thr Ile Thr Phe Leu Pro Leu Val Asp Ser Glu Arg  
 610 615 620  
 Lys Leu Leu His Val His Phe Leu Ser Ala Gln Glu Leu Gly Asn Glu  
 625 630 635 640  
 Glu Gln Gln Glu Lys Leu Leu Arg Glu Trp Leu Asp Cys Cys Val Thr  
 645 650 655  
 Glu Gly Gly Val Leu Val Ala Met Gln Lys Ser Ser Arg Arg Arg Asn  
 660 665 670  
 His Pro Leu Val Thr Gln Met Val Glu Lys Trp Leu Asp Arg Tyr Arg  
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<210> 1235  
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 <212> DNA  
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 180  
 atggagggat cgacctacgc cgagcctcca catcgttttg aggcaggcac cccgccgatc  
 240  
 gcacagctgg ctgccctcgg ggtggccgccc gactacctag atggcatcgg gatgcaggcc  
 300  
 atcgccgagc acgaacatga gctggctgct cggatgctcg aagactacca gaccgtcaag  
 360  
 ggagtgcagc cggagagagg ctg  
 383

<210> 1236  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 1236  
 Ala Ser Gln Ala Val Xaa Gln Ile Pro Val Asp Met Thr Thr Leu Gly  
 1 5 10 15  
 Ala Asp Leu Val Ala Phe Thr Gly His Lys Met Cys Gly Pro Thr Gly  
 20 25 30  
 Ile Gly Ile Leu Trp Gly Arg Tyr Asp Leu Leu Ala Glu Leu Pro Pro  
 35 40 45  
 Phe Leu Gly Gly Gly Glu Met Ile Glu Val Val Arg Met Glu Gly Ser  
 50 55 60  
 Thr Tyr Ala Glu Pro Pro His Arg Phe Glu Ala Gly Thr Pro Pro Ile

65		70		75		80									
Ala	Gln	Leu	Ala	Ala	Leu	Gly	Val	Ala	Ala	Asp	Tyr	Leu	Asp	Gly	Ile
			85					90						95	
Gly	Met	Gln	Ala	Ile	Ala	Glu	His	Glu	His	Glu	Leu	Ala	Ala	Arg	Met
			100					105						110	
Leu	Glu	Asp	Tyr	Gln	Thr	Val	Lys	Gly	Val	Gln	Pro	Glu	Arg	Gly	
		115					120						125		

&lt;210&gt; 1237

&lt;211&gt; 1608

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1237

```

ccatggccga agggccatac tctacaggcc tcctttctac agcaaaacag agcttcagct
60
acaccagcac attctgactc aacatggcta tacggttgct atcgctgaag aaaggctcaa
120
tgctggccta gggccggggc tactagaaca aggtgatctg ggctcttggg atctgctcat
180
ttgcctgtct tctaagaaag cagaaggaa accctgtata tccaaggaag tcatgtgcca
240
gttaggttta catcaaaagg caaacagatt accagaaata cagcagccac tttgcagaaa
300
ggaaggatta tgtcaaatag ttagaagatt ccagaaactg caacttccag tgagtccttc
360
tgtgtgtctg gatcagggaa tgcaattaaa gccgagtact tcgagtcacc ttttaaaaac
420
agtgaagcca cgtgtgtgga aaccagggga ctggagtcgt gaacagctga atgaaacgac
480
agtccttgct ccacatgaaa caatctttcg agccaaagat ctatctgtga ttcttaaagc
540
gtatgtgttg gtgacgtcct taaccctttt gcgtgcattc attcattcga ctggcacagt
600
ttggaatcca ccaaagaaaa aacgcttcac tgtcaagctg caaacatttt ttgagacatt
660
cctgagagcc agttcacctc aacaggcttt tgacattatg aaggaagcaa ttggcaaaact
720
actgctagcc gctgaagtat tcagtgaac atctactctg ggaccaaaga ctttccatag
780
atgcagattc tgctttcaac ttctaacttt tgatattggt tatggcagtt tcatgtaccc
840
tgtagtgctc caggtacacg agcattttaa ttttcaagat tatgataata tggattttga
900
ggaccaaagt acagaagaat tcctttttaa tgacactttc aattttctct tcctaatga
960
atcatcactt tccatatttt ctgagatatt tcagagactt tatagatcag atgttttcaa
1020
gggtgaaaac tatcaaaagg aactaaatca gtgtctgtcc ttagaagaaa ttaactcaat
1080
tatgactttc ataaaggaac ttggaagtct gggacaattc caactgctct tcccatctac
1140
tactcctggg attcagtcac tgatgcatga attttatgat gtggcaaact ctgtgggaaa
1200

```

tcctggctca gtctgaccc aatactgggc tcttttaaata gtatttgaac aatttcagtt  
 1260  
 catgaataaa aagacacagc cacatccact ggaatggaat tctttcacag aagataagaa  
 1320  
 cattgaaaaa ccacaagtgc catttgatgc aatagaaaat aaaaaagctg cagttccaca  
 1380  
 aattaaaaat gaaaataaag aaatacattg cagtgatgat gaaaacacac catgtcatat  
 1440  
 caagcagatc ttcacacatc cacatttgga actaaatcct gactttcatc caaagatcaa  
 1500  
 agattattac tgtgaagtcc catttgatgt ggtaacagtg acaattggag tggaaactcc  
 1560  
 taagtgtctg tgcaagggtc acctgtacga gcaggcaggg ccaagctt  
 1608

&lt;210&gt; 1238

&lt;211&gt; 458

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1238

Met	Cys	Gln	Leu	Gly	Leu	His	Gln	Lys	Ala	Asn	Arg	Leu	Pro	Glu	Ile
1				5					10					15	
Gln	Gln	Pro	Leu	Cys	Arg	Lys	Glu	Gly	Leu	Cys	Gln	Ile	Val	Arg	Arg
			20					25					30		
Phe	Pro	Glu	Leu	Gln	Leu	Pro	Val	Ser	Pro	Ser	Val	Cys	Leu	Asp	Gln
		35					40					45			
Gly	Met	Gln	Leu	Lys	Pro	Ser	Thr	Ser	Ser	His	Leu	Leu	Lys	Thr	Val
	50					55					60				
Lys	Pro	Arg	Val	Trp	Lys	Pro	Gly	Asp	Trp	Ser	Arg	Glu	Gln	Leu	Asn
65					70				75					80	
Glu	Thr	Thr	Val	Leu	Ala	Pro	His	Glu	Thr	Ile	Phe	Arg	Ala	Lys	Asp
			85					90						95	
Leu	Ser	Val	Ile	Leu	Lys	Ala	Tyr	Val	Leu	Val	Thr	Ser	Leu	Thr	Pro
		100						105					110		
Leu	Arg	Ala	Phe	Ile	His	Ser	Thr	Gly	Thr	Val	Trp	Asn	Pro	Pro	Lys
		115					120					125			
Lys	Lys	Arg	Phe	Thr	Val	Lys	Leu	Gln	Thr	Phe	Phe	Glu	Thr	Phe	Leu
	130					135					140				
Arg	Ala	Ser	Ser	Pro	Gln	Gln	Ala	Phe	Asp	Ile	Met	Lys	Glu	Ala	Ile
145					150					155					160
Gly	Lys	Leu	Leu	Leu	Ala	Ala	Glu	Val	Phe	Ser	Glu	Thr	Ser	Thr	Leu
			165						170					175	
Gly	Pro	Lys	Thr	Phe	His	Arg	Cys	Arg	Phe	Cys	Phe	Gln	Leu	Leu	Thr
			180					185					190		
Phe	Asp	Ile	Gly	Tyr	Gly	Ser	Phe	Met	Tyr	Pro	Val	Val	Leu	Gln	Val
	195						200					205			
His	Glu	His	Leu	Asn	Phe	Gln	Asp	Tyr	Asp	Asn	Met	Asp	Phe	Glu	Asp
	210					215					220				
Gln	Asn	Thr	Glu	Glu	Phe	Leu	Leu	Asn	Asp	Thr	Phe	Asn	Phe	Leu	Phe
225					230					235				240	
Pro	Asn	Glu	Ser	Ser	Leu	Ser	Ile	Phe	Ser	Glu	Ile	Phe	Gln	Arg	Leu
				245					250					255	
Tyr	Arg	Ser	Asp	Val	Phe	Lys	Gly	Glu	Asn	Tyr	Gln	Lys	Glu	Leu	Asn

```
<210> 1239
<211> 447
<212> DNA
<213> Homo sapiens
```

```
<210> 1240
<211> 149
<212> PRT
<213> Homo sapiens
```

<400> 1240  
 Ile Pro Thr Glu Arg Glu Arg Thr Glu Arg Leu Ile Lys Thr Lys Leu  
 1 5 10 15  
 Arg Glu Ile Met Met Gln Lys Asp Leu Glu Asn Ile Thr Ser Lys Glu  
 20 25 30  
 Ile Arg Thr Glu Leu Glu Met Gln Met Val Cys Asn Leu Arg Glu Phe  
 35 40 45  
 Lys Glu Phe Ile Asp Asn Glu Met Ile Val Ile Leu Gly Gln Met Asp  
 50 55 60  
 Ser Pro Thr Gln Ile Phe Glu His Val Phe Leu Gly Ser Glu Trp Asn  
 65 70 75 80  
 Ala Ser Asn Leu Glu Asp Leu Gln Asn Arg Gly Val Arg Tyr Ile Leu  
 85 90 95  
 Asn Val Thr Arg Glu Ile Asp Asn Phe Phe Pro Gly Val Phe Glu Tyr  
 100 105 110  
 His Asn Ile Arg Val Tyr Asp Glu Glu Ala Thr Asp Leu Leu Ala Tyr  
 115 120 125  
 Trp Asn Asp Thr Tyr Lys Phe Ile Ser Lys Ala Lys Lys His Gly Ser  
 130 135 140  
 Lys Cys Leu Val His  
 145

<210> 1241

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1241

acgcgtgtgc agcgtatcca gcaccgtcct cagaataata gctgtgaaaa ggaggaaggg  
 60  
 aactaggcag acagaccgac agataggggg aaaccgggat gtttaatgtg tccgaacaag  
 120  
 taggaagatc aatgaggcgc gagtgtgtgt gtgtacgtgt gcgcgtgtgt gtgtgagaga  
 180  
 gagagaaaga aagaagaaag gtcccgattg caacgtgtca gatcttgcaa ccttcccccc  
 240  
 acccaacaca acaaccctca gacacaaaaa caccattgct gactgatacc ccaggtcttc  
 300  
 aggggttaaag gaaccgtgtg ttggcagcgc aattgtgcag acgctgtaag gccaaaacga  
 360  
 ggatttgtgt tgtgagggtcg gtggtgcggt cttttctttc tcttctcgcc tgttttcccg  
 420  
 gagtgcctgg gttgcgagaa aggcgcacgc caggctgtgc agccgaatcg cttcgcaatt  
 480  
 attcatgct  
 489

<210> 1242

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1242

Met Asn Asn Cys Glu Ala Ile Arg Leu His Ser Leu Arg Cys Ala Phe



```

      1           5           10           15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys
      20           25           30
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser
      35           40           45
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp
      50           55           60
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val
      65           70           75           80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro
      85           90           95
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His
      100          105          110
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His
      115          120          125

```

<210> 1243  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1243
ntagactccg tcgatcccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgctgctgt ccctaccacc cgcagtcccc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1244
Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro
1           5           10           15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr
      20           25           30
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly
      35           40           45
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr
      50           55           60
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg
      65           70           75           80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys

```

	85		90		95										
Arg	Leu	Asn	Pro	Lys	Arg	Ala	Leu	Arg	Asp	Ala	Ala	Arg	Ala	Ala	Gln
		100						105					110		
Ala	His	Arg	Ala	Ser	Thr	Xaa	Ala	Gln	Ala	Ala	Ile	Lys	Ala	Asp	Gln
		115					120						125		
Glu	Ala														
	130														

&lt;210&gt; 1245

&lt;211&gt; 339

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1245

gccaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa  
60  
ccacaatcta tgcccgtgac ttttctgagc tccaggagtt ttttagcact gccagacttc  
120  
tctggagagg aggaggtttc tgccactttt caatttcgaa cttggaataa ggcagggttc  
180  
ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga  
240  
aaacttaagt cgaatcteta ccagccaaga aaattaccca gtgacatcac agcagggtgc  
300  
gaattaaatg atgggcagtg gcattctgtc tctttatct  
339

&lt;210&gt; 1246

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1246

Ala	Lys	Gln	Gln	Lys	Pro	Gln	Ile	Ile	Ala	Met	Gly	Asn	Val	Ser	Phe
1				5					10					15	
Ser	Cys	Ser	Gln	Pro	Gln	Ser	Met	Pro	Val	Thr	Phe	Leu	Ser	Ser	Arg
		20						25					30		
Ser	Phe	Leu	Ala	Leu	Pro	Asp	Phe	Ser	Gly	Glu	Glu	Glu	Val	Ser	Ala
		35				40					45				
Thr	Phe	Gln	Phe	Arg	Thr	Trp	Asn	Lys	Ala	Gly	Leu	Leu	Leu	Phe	Ser
	50				55					60					
Glu	Leu	Gln	Leu	Ile	Ser	Gly	Gly	Ile	Leu	Leu	Phe	Leu	Ser	Asp	Gly
65				70				75						80	
Lys	Leu	Lys	Ser	Asn	Leu	Tyr	Gln	Pro	Arg	Lys	Leu	Pro	Ser	Asp	Ile
			85				90						95		
Thr	Ala	Gly	Val	Glu	Leu	Asn	Asp	Gly	Gln	Trp	His	Ser	Val	Ser	Leu
			100				105						110		
Ser															

&lt;210&gt; 1247

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1247

ttgacctcca acccgggcac gcgcatacctg cccagatcc cgatggatgg gcatgacctc  
60  
aaccgggtgt ggcgggacgt cggcctgac gtgcacccgc cgatgctcta catgggctac  
120  
gtcggtttct ccgtggcctt tgcgtttgcc atcgccgcct tgctcggcgg gcgcctcgat  
180  
gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcgtt cctcggtatc  
240  
ggtatcaccc tcggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtggttc  
300  
tgggaccccg gggaaaaccc cttcttcattg ccctggctgg ggggcacccc gctgattcac  
360  
tcgctg  
366

&lt;210&gt; 1248

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1248

Leu	Thr	Ser	Asn	Pro	Gly	Thr	Arg	Ile	Leu	Pro	Gln	Ile	Pro	Met	Asp
1				5					10					15	
Gly	His	Asp	Leu	Asn	Pro	Val	Trp	Arg	Asp	Val	Gly	Leu	Ile	Val	His
			20					25					30		
Pro	Pro	Met	Leu	Tyr	Met	Gly	Tyr	Val	Gly	Phe	Ser	Val	Ala	Phe	Ala
			35				40					45			
Phe	Ala	Ile	Ala	Ala	Leu	Leu	Gly	Gly	Arg	Leu	Asp	Ala	Ala	Trp	Ala
	50					55					60				
Arg	Trp	Ser	Arg	Pro	Trp	Thr	Ile	Val	Ala	Trp	Ala	Phe	Leu	Gly	Ile
65				70						75				80	
Gly	Ile	Thr	Leu	Gly	Ser	Trp	Trp	Ala	Tyr	Tyr	Glu	Leu	Gly	Trp	Xaa
			85						90				95		
Gly	Trp	Trp	Phe	Trp	Asp	Pro	Gly	Glu	Asn	Pro	Phe	Phe	Met	Pro	Trp
			100					105					110		
Leu	Gly	Gly	Thr	Pro	Leu	Ile	His	Ser	Leu						
			115				120								

&lt;210&gt; 1249

&lt;211&gt; 374

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggt gccggcaatg  
60  
ggcgcgagct tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc  
120  
attccactgg aaagcgccgt ggcggatgag gtggtgtgag cacaagcctt ccattggttt  
180  
tccagcgagg cggccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg  
240

ctgggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaatcatc  
 300  
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgcca agccttcact  
 360  
 ggcgagtatt ttg  
 374

<210> 1250  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1250  
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro  
 1 5 10 15  
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His  
 20 25 30  
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala  
 35 40 45  
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala  
 50 55 60  
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly  
 65 70 75 80  
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile  
 85 90 95  
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr  
 100 105 110  
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe  
 115 120

<210> 1251  
 <211> 742  
 <212> DNA  
 <213> Homo sapiens

<400> 1251  
 accggtctct tcctcgaaa ggcagggccg aggggcttgc ggggcagcca tggaggcgac  
 60  
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagttgg gcgcctcctt  
 120  
 ccttgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc  
 180  
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgtccca  
 240  
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact  
 300  
 atttccacat ggctacaac gtcatacgc cttttctctt gctcaagctc atcgagcggg  
 360  
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg  
 420  
 ccagcatcca cctgggtgggt gactctgtca accaccgct gctcttcagt ggctaccagc  
 480  
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgacg  
 540

actcctttga gctgctctac tattatgatg agtacctggg tcactgcatg tggtagatcc  
 600  
 ccttcttctc catcctcttc atgtacttca gcggtctgctn ttactgcctc taaagctgag  
 660  
 agcttgattc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtac  
 720  
 ctggtcaccg agggccagat ct  
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1				5				10					15		
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20					25				30			
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
			35				40					45			
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser	
	50					55				60					
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65					70					75				80	

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga  
 60  
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc  
 120  
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc  
 180  
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattggaa  
 240  
 acagtcgtgg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg  
 300  
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag  
 360  
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg  
 420  
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtctctca  
 480  
 ccacccagtg tgggtgaccc ggtcgagcat ttatcagaga cgtccgctga ttctttggaa  
 540  
 gccatgtctg aggggggatgc tccaaccctt ttttccagag gcagccggac tcgtgcgagc  
 600  
 cttcctgtgg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc  
 660

cagtatggag atgaa  
675

<210> 1254

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1254

```

Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
 1           5           10           15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
          20           25           30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
          35           40           45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
          50           55           60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65           70           75           80
Leu Gln Tyr Gly Asp Glu
          85

```

<210> 1255

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1255

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ncgccgatta ccaaggctat ggatgtgtgg gccttggggc taacgctata ctgtctgctg
60
ttcggtcgag tgccatttga tgcagagacg gactacttgc tgctggaaag taccctgcat
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgcg tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcatgca
240
gtacgccatc tgctcgatgc cttctcgcac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gtcgtggca gagtcatggg aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtag aaggcccgcg g
401

```

<210> 1256

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1256

```

Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
 1           5           10           15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
          20           25           30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

35	40	45
Met Gly Ser Asp Arg Val	Leu Val Gly Pro Arg	Pro Ala Arg Trp Pro
50	55	60
Ser Ser Gln Glu Thr	Pro Asn Val Pro Leu Ser	Gly Glu Ala His Ala
65	70	75
Val Arg His Leu Leu Asp	Ala Leu Leu Asp Lys	Asp Pro Ala Thr Arg
85	90	95
Leu Thr Leu Asp Arg Val	Ile Thr His Pro Trp	Leu Val Ala Glu Ser
100	105	110

Trp

<210> 1257  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1257  
 cgcgtagacg tgattgaagg tgatgtcgcc aacgccgacc tgggtggcgca agccgccatc  
 60  
 ggcgccacgg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac  
 120  
 ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc  
 180  
 aaggccggtg tgaagcgtgt ggtatttgc tccagcggtg cggtgtatgg caacaatggc  
 240  
 gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg  
 294

<210> 1258  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1258  
 Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala  
 1 5 10 15  
 Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala  
 20 25 30  
 Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn  
 35 40 45  
 Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val  
 50 55 60  
 Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly  
 65 70 75 80  
 Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro  
 85 90 95  
 Tyr Ala

<210> 1259  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1259

nnacactcta gcctctgact caaggaagct gccagggtc ttgcccttcg gtttgggggg  
 60  
 atcccgcttc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcggtggc  
 120  
 ctcaccgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc  
 180  
 agcgtgggtg acgtgggctaa gggagtggtc caggagggcc tggacaccac tcggtctgca  
 240  
 cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catgggtaag  
 300  
 ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg  
 360  
 gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc  
 417

&lt;210&gt; 1260

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1260

Leu Lys Glu Ala Ala Gln Gly Leu Ala Leu Arg Phe Gly Gly Ile Pro  
 1 5 10 15  
 Ser Pro Phe Val Trp Ser Arg His Ser Glu Asn Val Arg Ser Cys Arg  
 20 25 30  
 Arg Gly Leu Thr Val Val Cys Ser Lys Met Ser Arg Ala Lys Asp Ala  
 35 40 45  
 Val Ser Ser Gly Val Ala Ser Val Val Asp Val Ala Lys Gly Val Val  
 50 55 60  
 Gln Gly Gly Leu Asp Thr Thr Arg Ser Ala Leu Thr Gly Thr Lys Glu  
 65 70 75 80  
 Ala Val Ser Ser Gly Val Thr Gly Ala Met Asp Met Ala Lys Gly Ala  
 85 90 95  
 Val Gln Gly Gly Leu Asp Thr Ser Lys Ala Val Leu Thr Gly Thr Lys  
 100 105 110  
 Asp Thr Val Ser Thr Gly Leu Thr Gly Ala Val Asn Val Ala Lys Gly  
 115 120 125  
 Pro Val Gln Ala Gly  
 130

&lt;210&gt; 1261

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1261

ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag  
 60  
 ctgggtccgcc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg  
 120tgaccctggc ggtcggctgg tggatcgaca acaaggtcag cgcccgcctg 180  
 ggcaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg  
 240



tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag  
300

accacctcgt tcgtcgcgga catcggtgct  
330

<210> 1262

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1262

Xaa	Ala	Arg	Ala	Val	Arg	His	Gln	Glu	Met	Asn	Met	Asp	Leu	Asn	Ala
1				5				10					15		
Glu	Val	Asp	Gln	Leu	Val	Arg	Gln	Ser	Gln	Thr	Trp	Ile	Pro	Leu	Ile
			20					25					30		
Met	Glu	Tyr	Gly	Ser	Arg	Leu	Leu	Leu	Ala	Leu	Leu	Thr	Leu	Ala	Val
		35					40					45			
Gly	Trp	Trp	Ile	Asp	Asn	Lys	Val	Ser	Ala	Arg	Leu	Gly	Lys	Leu	Val
	50					55					60				
Gly	Leu	Arg	Asn	Ala	Asp	Leu	Ala	Leu	Gln	Gly	Phe	Ile	Ser	Thr	Leu
65				70						75					80
Ser	Asn	Ile	Gly	Leu	Lys	Val	Leu	Leu	Phe	Val	Ser	Val	Ala	Ser	Met
			85						90					95	
Ile	Gly	Ile	Glu	Thr	Thr	Ser	Phe	Val	Ala	Asp	Ile	Gly	Ala		
			100					105					110		

<210> 1263

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1263

acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg  
60  
gcatcgatga tgagtttgct cgcctgggca acacctagca gcaatggcat cgatagtccc  
120  
tgcccagcct gctccatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac  
180  
gtcaacagac cgtcaccgtg gttgacgac tcgccggtgg aggcgtcctt gacgacgac  
240  
tgccacgcg ccaggaata catctcccca tccacccaaa agaacgcccc caagctgggc  
300  
atcttgGCCA gcccgatgat cgagagggtt tcaacaagcg actcgggac c  
351

<210> 1264

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1264

Met	Pro	Ser	Leu	Gly	Ala	Phe	Phe	Trp	Val	Asp	Gly	Glu	Met	Tyr	Ser
1				5				10						15	
Leu	Ala	Arg	Gly	Gln	Ile	Val	Val	Lys	Asp	Ala	Ser	Thr	Gly	Glu	Ile

```

      20      25      30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
      35      40      45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
      50      55      60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
65      70      75      80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
      85      90      95
His Arg Pro Arg
      100

```

&lt;210&gt; 1265

&lt;211&gt; 318

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1265

```

accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttgataac gctcgcttgg tggaatcgtc gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

```

&lt;210&gt; 1266

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1266

```

Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1      5      10      15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
      20      25      30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
      35      40      45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
      50      55      60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
65      70      75      80
Asp Met Pro Leu Thr Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
      85      90      95
Ser Arg Arg

```

&lt;210&gt; 1267

&lt;211&gt; 343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1267

```

nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttgatg aacacttgatg
60
ggaactgtcc cacggcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac
120
aacctgtgtt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
180
tattccccct gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
240
gatactcatc aaacaccagg ctgtcattgg ggacaggggtg agctctggct gttggtgcag
300
catggtagga agagcaccaa gtccctggact ctgttgattt ata
343

```

&lt;210&gt; 1268

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1268

```

Met Pro His Ser Leu Cys Phe Tyr Ser Pro Cys Glu His Leu Trp Glu
1      5      10      15
Leu Ser His Gly Pro Cys Phe Cys Ala Pro Ala Asp Thr Arg Gly Lys
20      25      30
Cys Pro Thr Thr Cys Val Phe Val Pro Leu Val Asn Thr Arg Gly Lys
35      40      45
Cys Pro Thr Thr Cys Val Phe Ile Pro Leu Val Asn Thr Arg Gly Lys
50      55      60
Cys Pro Met Ala Arg Val Ser Val His Leu Arg Ile Leu Ile Lys His
65      70      75      80
Gln Ala Val Ile Gly Asp Arg Val Ser Ser Gly Cys Trp Cys Ser Met
85      90      95
Val Gly Arg Ala Pro Ser Pro Gly Leu Cys
100      105

```

&lt;210&gt; 1269

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1269

```

tcgcgatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
60
ggacgccgac ctggagccgg ccgccctaga cgggctgata gtccaggtgg ggtccccccg
120
cggcgcggac tacgacaccg tgtccgaaac ctttgggtct tcgccacaat tctgcagcca
180
gacctggggc gcacggccgg ttcaccgcaa cggatgacat ggcagcggcc atggcggtgt
240
ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
300

```

ggttgggtga ggcggacaat ccctttcacc atgagcaatt ccgggagaat ggcgggcccgc  
360

acggggaaga ggggtggatc ggcattggcct c  
391

<210> 1270

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1270

Met	Met	Lys	Gly	Ile	Val	Arg	Leu	Thr	Gln	Pro	Pro	Glu	Val	Arg	Ile
1				5					10					15	
Leu	His	Ala	His	Glu	Ala	Ser	His	Pro	Pro	Arg	Glu	Ala	Ala	Gly	His
			20					25					30		
Arg	His	Gly	Arg	Cys	Gln	Asp	His	Arg	Cys	Gly	Glu	Pro	Ala	Val	Arg
		35				40					45				
Pro	Arg	Ser	Gly	Cys	Arg	Ile	Val	Ala	Lys	Asp	Gln	Arg	Phe	Arg	Thr
	50				55					60					
Arg	Cys	Arg	Ser	Pro	Arg	Arg	Gly	Gly	Thr	Pro	Pro	Gly	Arg	Ser	Ala
65				70					75					80	
Arg	Leu	Gly	Arg	Pro	Ala	Pro	Gly	Arg	Arg	Pro	Ala	Met	Arg	Pro	Ala
			85				90						95		
Gly	Arg	Arg	Gln	Pro	Ser	Ala	Ala	Pro	Ile	Ala	Pro	Asp	Arg		
			100				105						110		

<210> 1271

<211> 661

<212> DNA

<213> Homo sapiens

<400> 1271

acgcgtcggtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga  
60  
accagaaagc gtcattcgggg tgggtgaacga gaacgggcca tgttgtggtg ggacggataa  
120  
cccccggttg cgtcaccata tggcccacta aagagttcac cagggttgat ttaccagccc  
180  
cggtcgaccc tctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggcaaaa  
240  
tatagtcggtt aagctgggta gcatgcgctc gtgccagccc ggcttgagta atagcctccg  
300  
gcaaattcaa ggggaactgg gcctgacgca ggttgtgccg cagatcggtc aacgacagca  
360  
gtatctgctc agtggttcatt gtgacccctc ctgggtcactc gtcaggcctg tggcggcgcc  
420  
cactgcaact cgttgttgac cggctgggtg cgacgtcgct tgaggaatgc gggcagttctc  
480  
ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata  
540  
cggttgatga gctcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg  
600  
tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg  
660

t  
661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

Met	Asn	Thr	Glu	Gln	Ile	Leu	Leu	Ser	Leu	Thr	Asp	Leu	Arg	His	Asn
1				5					10					15	
Leu	Arg	Gln	Ala	Gln	Phe	Pro	Leu	Asp	Leu	Pro	Glu	Ala	Ile	Thr	Gln
		20					25					30			
Ala	Gly	Leu	Ala	Arg	Arg	Ile	Ala	Asn	Gln	Leu	Asn	Asp	Tyr	Ile	Leu
	35					40					45				
Pro	Arg	Leu	Glu	Thr	Ile	Asp	Ala	Pro	Leu	Leu	Ala	Val	Val	Gly	Gly
	50				55					60					
Ser	Thr	Gly	Ala	Gly	Lys	Ser	Thr	Leu	Val	Asn	Ser	Leu	Val	Gly	His
65				70				75						80	
Met	Val	Thr	Gln	Pro	Gly	Val	Ile	Arg	Pro	Thr	Thr	Thr	Ser	Pro	Val
			85					90						95	
Leu	Val	His	His	Pro	Asp	Asp	Ala	Phe	Trp	Phe	Asp	Gly	Asp	Arg	Val
		100					105						110		
Leu	Pro	Thr	Leu	Val	Arg	Ser	Gln	Val	Ala	Ser	Asn	Asp	Ala		
	115						120					125			

<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc  
60  
gacaaggctg aactggatt ggtccggcat ggctgcgatc gtgccgtcgt cgaagccgtt  
120  
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatggtgag  
180  
gttatctgcg ctcgacacat cacgagtcgt cgctctcgag cgctgcttgg aggagctcaa  
240  
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct  
300  
gaacaagtga ggttggtcga cgcagcgcgg cagctcgacg tcgttgaccg ggctgccgga  
360  
gatgagctgg caggctacct aagtcgacat gcacagctgt ggctcgaggt tcgtgctgca  
420  
tcccagcgtc ttcagcgcct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg  
480  
cttacgcgt  
489

<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

```

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1           5           10           15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
      20           25           30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
      35           40           45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
      50           55           60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
      65           70           75           80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
      85           90           95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
      100          105          110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
      115          120          125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
      130          135          140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
      145          150          155          160
Leu Thr Arg

```

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

```

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggaggc tgaacttctc
60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccgaggatg cagggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
180
ggcaaggctc atctaattgga taaactcaat caggagatac ttcgcctggc aaacgaattc
240
ggcgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggt cagcaggctg actcccgggtg aacgtctcag gctgcgcatt
360
gctacagcca tcgcgttggt acgc
384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

```

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```

```

      1           5           10           15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20           25           30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35           40           45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50           55           60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
      65           70           75           80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85           90           95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100          105          110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115          120          125

```

&lt;210&gt; 1277

&lt;211&gt; 392

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggctt tctcagctc tgttctgcct tctctccctg ccatcccacc cacaaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaataca
180
aagtctcctc aaccagtga tcatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaaac tactcctggt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

&lt;210&gt; 1278

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
      1           5           10           15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20           25           30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35           40           45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50           55           60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
      65           70           75           80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95  
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu  
 100 105 110  
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln  
 115 120 125  
 His Asp  
 130

<210> 1279  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 1279  
 atggagtcgc agactctccg ccacatgata gaggacgact gcgccgacaa cggcatccca  
 60  
 ctccccaacg tcaactccag gatcctctct aaggatcatg agtactgcaa cagtcacgtc  
 120  
 cagcgcgccg ccaaaccgc tgactccgct gcctccgagg gcggcgagga cctcaagagc  
 180  
 tgggacgcga agttcgtcaa ggtggaccag gctacgctct tcgacctcat cctggctgcc  
 240  
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg  
 297

<210> 1280  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1280  
 Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp  
 1 5 10 15  
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val  
 20 25 30  
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp  
 35 40 45  
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys  
 50 55 60  
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala  
 65 70 75 80  
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly  
 85 90 95  
 Ala Asp Met

<210> 1281  
 <211> 515  
 <212> DNA  
 <213> Homo sapiens

<400> 1281  
 acgcgtgaag ggggcttttg aggggatggc ttctggactg cacgatgggt gaacacagtt  
 60



ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atggggaggg  
120  
tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac  
180  
gccctcccca ctaccaagta ggcactgceg gcaggagtcg ccacccccac cccaaggaag  
240  
ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacgc  
300  
ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggt ccactcaagg  
360  
ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcac  
420  
gtggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt  
480  
ttgcttctaa tttttaaaaa cattcaatgt gtaca  
515

<210> 1282  
<211> 135  
<212> PRT  
<213> Homo sapiens

<400> 1282  
Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe  
1 5 10 15  
Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala  
20 25 30  
Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro  
35 40 45  
His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys  
50 55 60  
Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly  
65 70 75 80  
Val Ile Arg Arg Ile Ala Lys Asp Val Thr Thr His Gln Leu Trp Glu  
85 90 95  
Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu  
100 105 110  
Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu  
115 120 125  
Ser Thr Gly Leu Ile Ser Ser  
130 135

<210> 1283  
<211> 296  
<212> DNA  
<213> Homo sapiens

<400> 1283  
gaattcctca caatgaactg cagtgtctgg aggaccagtt gggtagcctt actccgggtc  
60  
tccactgcag aacttataca tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa  
120  
gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actggttaat  
180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt  
240  
cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtgc tgctcn  
296

<210> 1284

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1284

Met	Asn	Cys	Ser	Val	Trp	Arg	Thr	Ser	Trp	Val	Ala	Leu	Leu	Arg	Val
1				5					10					15	
Ser	Thr	Ala	Glu	Leu	Ile	His	Ile	Cys	Phe	Val	His	Thr	Lys	Lys	Asn
			20					25					30		
Ser	Ser	Pro	Lys	Glu	Ser	Arg	Leu	Gly	Leu	Leu	Gly	Gly	Arg	Lys	Val
		35					40					45			
Pro	Thr	Gly	Asn	Ser	Leu	Val	Asn	Phe	Lys	Glu	Leu	Arg	Lys	Gly	Arg
	50					55					60				
Lys	Asp	Gly	Phe	Phe	Ser	Cys	Glu	Ser	Arg	Gln	Gly	Pro	Asp	Asp	Asn
65					70					75				80	
Pro	Pro	Arg	Ser	Glu	Arg	Asn	Phe	Gln	Pro	Thr	Ser	Ala	Ala		
				85						90					

<210> 1285

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1285

gggcccttcc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca  
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gtgaaaggtc catctagagg aggtaaaaga cagggtgag ggaaaacgcc ttgtacagtc  
120  
aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca  
180  
agaagcaaca aaagggattc tacacctcag accagggagg gggaatgtgt acaaagattg  
240  
gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc  
300  
aaacccacac ttcagaggca ggctttaaaa cgcttgactt ctgtcagggc cacaggctgg  
360  
gctgccc aaa gctcctacgg ggctggggga tccgagagag gacttcccac tagtccaaga  
420  
tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcggggccct  
480  
gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt  
526

<210> 1286

<211> 102

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
          20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
          35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
          50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
          85           90           95
Ser Pro Arg Cys Gly Asp
          100

```

&lt;210&gt; 1287

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1287

```

acgcgtgaag gggagaggca gctccagggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacaggc agcgtggctg gggctgggca ggccttccag tttgattgca gccagaggtt
120
caggtgagaa gaaggtacaa caagcaagga aggcccccagg aagccactgg ggggtgtttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgtc ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

```

&lt;210&gt; 1288

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
          20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
          35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
          50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
          85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

<400> 1289  
 acgcgtgtct gtgtacaggt ggaaggggat gggtatgaga tggcgcagcg tgtgcatggg  
 60  
 cacggcgtat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt  
 120  
 cctgcacggt ggaggaggca aggtggcccc tgccctgtggg cacagagccc accttccggt  
 180  
 ccagcccgag gcccctttcc cagagcccc tcccaagggg ccataccacc tgcattcccca  
 240  
 agatggcggtg gggcgctcct ggtgcaggag caggggacag tcagggaggc gtgtggcgga  
 300  
 cagtagcagc cccccagccc cctcccccc accggt  
 336

<210> 1290  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 1290  
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala  
 1 5 10 15  
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr  
 20 25 30  
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu  
 35 40 45  
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro  
 50 55 60  
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala  
 65 70 75 80  
 Ala Pro Gln Pro Pro Ser Pro His Arg  
 85

<210> 1291  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 1291  
 tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga  
 60  
 atcttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattcctca  
 120  
 taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag  
 180  
 gtaaaccggg tttcccccaa cggataccca tcaactgcat gctcggtttt ttctatccga  
 240

cgccccagcg ggtcatacac catcctgacc acgctaccat cgtcattacg cacttcaacc  
300  
agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg  
360  
accatccgcc caaacgcgt  
379

<210> 1292

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1292

Met	Val	Glu	Lys	Arg	Ser	Ala	Lys	Arg	Gly	Val	Gln	Arg	Phe	Ala	Tyr
1				5					10					15	
Asp	Ala	Glu	Ser	Arg	Leu	Val	Glu	Val	Arg	Asn	Asp	Asp	Gly	Ser	Val
			20					25					30		
Val	Arg	Met	Val	Tyr	Asp	Pro	Leu	Gly	Arg	Arg	Ile	Glu	Lys	Thr	Glu
		35				40						45			
His	Gly	Ser	Asp	Gly	Tyr	Pro	Leu	Gly	Glu	Thr	Arg	Phe	Thr	Trp	Asp
	50					55					60				
Gly	Leu	Arg	Leu	Leu	Gln	Glu	His	Lys	His	Ser	Gln	Thr	Ser	Leu	Tyr
65					70					75				80	
Val	Tyr	Glu	Asp	Glu	Gly	Tyr	Gln	Pro	Leu	Ala	Arg	Val	Asp	Gly	Ala
				85					90					95	
Gly	Pro	Leu	Gln	Lys	Ile	Arg	Tyr	Tyr	His	Asn	Asp	Leu	Asn	Gly	Leu
			100					105						110	
Pro	Glu	Gln	Leu	Thr	Glu	Val	Asp	Gly							
			115					120							

<210> 1293

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1293

nngccggccg cccgagagct gttcgaggcg tgccgcaacg gggacgtgga acgagtcaag  
60  
aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg  
120  
ctgcacttcg ccgcagggtt tgggcggaaa gacgtagtgt aatatttgct tcagaatggt  
180  
gcaaagtgtc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt  
240  
ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat  
300  
aattggaatt atactcctag aggggtggagt gtgctcgcga  
340

<210> 1294

<211> 98

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1294

```

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1           5           10           15
Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
      20           25           30
Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
      35           40           45
Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
      50           55           60
Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
65           70           75           80
Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
      85           90           95
Asn Ala

```

&lt;210&gt; 1295

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1295

```

ggatcccggg gacctcgctc gcgaacgtca cctcgctccag ggccgaggcg cggaacaccg
60
acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcggggagg
120
cgaaggtgcc gatctggctg cgctcggcgt agaccagcga cggcggttcg cccgacgccca
180
cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgctcg
240
cgagctcctc ctctgcccgg tcgagccgca ccgtcgcgat ctgctcgccg gcaccgaagc
300
ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
351

```

&lt;210&gt; 1296

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1296

```

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1           5           10           15
Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
      20           25           30
Ala Val Arg Arg Arg Arg Gly Arg Arg Arg Cys Arg Ser Gly Cys Ala
      35           40           45
Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
      50           55           60
Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
65           70           75

```

&lt;210&gt; 1297

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1297

gtgcacccgg attcccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga  
 60  
 gacacccagg cctcaggccc catgggcacg ctccacgcca cggctcctac cagagggaca  
 120  
 gatacactct acaaatctcg gggcccacca caccaagaag acacggagga gccaacaaaa  
 180  
 gaaggaccat acgaaatgca cccccaagc aaccaaccaa tccaagaaaa aatacgtctc  
 240  
 agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctgggtcaag  
 300  
 caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct  
 356

&lt;210&gt; 1298

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10					15	
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25					30		
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
			35				40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
			50				55				60				
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65					70					75				80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
				85						90					

&lt;210&gt; 1299

&lt;211&gt; 307

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1299

ggatccactt ctaagatgtc tcactcacgt ggtgatggca gcaggcctca gactctgggtg  
 60  
 gttgttggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttctctg  
 120  
 tgtcttttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg  
 180  
 gagttttctg ggggtggggtc acgggtcttg cccggagtgc gccctggcaa aggctgtgct  
 240  
 cagtgatcct ggagcggagc gaagtgtttc cgtgactctg cagccgcagt tcttagggct  
 300  
 tccttag  
 307

<210> 1300  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 1300  
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser  
 1 5 10 15  
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala  
 20 25 30  
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val  
 35 40 45  
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu  
 50 55 60  
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val  
 65 70 75 80  
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro  
 85 90

<210> 1301  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 1301  
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa  
 60  
 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg  
 120  
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaaggtc tggcgcaaac  
 180  
 atcatgtttg aaggcgcgca agggctctttg ttggatgttg atcatggtac ttaccggtat  
 240  
 gtgacttcat ctaatacgac tgcggggcgga gcgccagcgg gaacagggtt tggtcctttg  
 300  
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg ttctggacct  
 360  
 ttccctactg agttgtttga cgaagatggg gagcgtcttg gtacgcgt  
 408

<210> 1302  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 1302  
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr  
 1 5 10 15  
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu  
 20 25 30  
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile  
 35 40 45  
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu



50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr
65					70					75					80
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
			85						90					95	
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
		100						105					110		
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120					125			
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130					135										

&lt;210&gt; 1303

&lt;211&gt; 1037

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1303

```

gccggggggg g gatgctatc taacatcttc atgttcaacc cagagaagaa acatcccgcc
60
gtttgccctg gggccctctc atcccacatc attttttcaa cccttcccca ncctttcnga
120
aatagggccca accccttaaa aancaaatnt tcanataaac ccttttcctt ccaccctttt
180
cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
240
cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca ccagctcag
300
ctggcacaaa aatactgccca ccacaccttc accctgecta gccaacctg gcagggcctc
360
ggagtagcct gccagctaaa atacgggttg ccagataac tgtgaatgtc agataagaat
420
cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatttctg
480
tttatctgaa actcaaattt gcctgggcgt cctgtacttt tcttaactaa atttggtgcc
540
tctacacaca aggtccctgg ggtggggggg cacaggagca agccccttcc caggctgggt
600
ccctgccggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
660
ccggcgacag acggacaaag gctgctcagg agacactgca caccttcctc tttcttgtct
720
gggggctcaa gaatccagac gccacctcc ccgagcgagc accaagacag gaagccaacc
780
tgcaatgcc agccactgc gaccacagg ctctgccggg gtcctgccgg aaccagggt
840
tccggtccag aagccaggga taaatgccgc ttctcctata gggacgggtca gagtagagag
900
ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
960
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1020
tggateccac gcgtggc
1037

```

<210> 1304  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1304  
 Met Glu Pro Val Pro Gly Ser Arg Arg Gln Thr Asp Lys Gly Cys Ser  
 1 5 10 15  
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser  
 20 25 30  
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala  
 35 40 45  
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu  
 50 55 60  
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile  
 65 70 75 80  
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly  
 85 90 95  
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser  
 100 105 110  
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly  
 115 120 125  
 Ser His Ala Trp  
 130

<210> 1305  
 <211> 775  
 <212> DNA  
 <213> Homo sapiens

<400> 1305  
 nacgcgttct gcgaggccat gcggggtctat gccccgcggc cgttgacctc gccacactc  
 60  
 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggctcctggta cgagtttttc  
 120  
 ccgcgctctc aggggtgctta tgcgatgcg gacggtcact gggtttcagg tactttcgac  
 180  
 acctcctggg agcgctgga cgccgccgct gcgatgggat ttgacgttgt ttacctgccc  
 240  
 gcgatccatc ccatggggcca agccttcgc aagggcaagg acaacaccct gaccccaggt  
 300  
 ccggacgatc cgggatcgcc gtgggccatc ggatcgtctg atggcgcca tgacaccatt  
 360  
 caccgacac taggcacctt cgacgacctc gaccgtttcg tggcccacgc tcatgacctc  
 420  
 ggcatggagg tggccctaga ttttgccttg caagcctcac cagaccaccc gtgggtacac  
 480  
 cagcaccgg agtggttcac gacccgcgtt gatggcacca tcgcctatgc agaaaattca  
 540  
 cccaaaaagt atcaggacat ctaccgatc aacttcgaca atgaccctga cggatatctac  
 600  
 caggaatgct tgcggctgct ggagttatgg atctcccacg gcgtgacgat tttccgcgtc  
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca ggttcacgt  
 720  
 cgtcaccocg aggtcatctt cctggcagag gccttcaccc gtcccagat gatca  
 775

<210> 1306  
 <211> 258  
 <212> PRT  
 <213> Homo sapiens

<400> 1306  
 Xaa Ala Phe Cys Glu Ala Met Arg Val Tyr Ala Pro Arg Pro Leu Thr  
 1 5 10 15  
 Ser Pro Thr Leu Pro Ala Pro Leu Arg Val Glu Arg Arg Arg Ala Leu  
 20 25 30  
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val  
 35 40 45  
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu  
 50 55 60  
 Arg Leu Asp Ala Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro  
 65 70 75 80  
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr  
 85 90 95  
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser  
 100 105 110  
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp  
 115 120 125  
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val  
 130 135 140  
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His  
 145 150 155 160  
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr  
 165 170 175  
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe  
 180 185 190  
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu  
 195 200 205  
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His  
 210 215 220  
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg  
 225 230 235 240  
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu  
 245 250 255  
 Met Ile

<210> 1307  
 <211> 624  
 <212> DNA  
 <213> Homo sapiens

<400> 1307  
 cggccggtgg ggagtgccaa gccccaggct ccctgcatcc cacttctggt gaggtcagtg  
 60

atgctgggca catgcggtca gggccctgtg cctgagccgt ggaactccac agccattcca  
 120  
 catgttcagt cccacaccct gaggccaagg caccctgagt ccctgaggga gcaaggccct  
 180  
 gccacccgag gctgccgctg cagaggcaaa cagccccgag caaggcccg gcaacccag  
 240  
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg ccggccagtc ggggtggcca  
 300  
 taggctaacg agaagccagg gcctccctcc cactgggct tccacaaaa acctgactaa  
 360  
 tgtccaggga cagccaaagg ccttgaggct agctgggtgg aacaccttcc ccctaccatc  
 420  
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg  
 480  
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc  
 540  
 cctcccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gcccaagacc  
 600  
 tcccccaacc ttggtctgac gcgt  
 624

<210> 1308  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

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 Arg Gly Ala Leu Ala Ser Gly Cys Gly Thr Glu His Val Glu Trp Leu  
 50 55 60  
 Trp Ser Ser Thr Ala Gln Ala Gln Gly Pro Asp Arg Met Cys Pro Ala  
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<210> 1309  
 <211> 563  
 <212> DNA  
 <213> Homo sapiens

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 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa  
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 attgccgcag gtgtgccgat cgtgcagggtg tgtgtcagca cgtatgtgaa gcacatgaag  
 360  
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 420  
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 <212> PRT  
 <213> Homo sapiens

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 Trp Val Pro Leu Phe Gly Gln Leu Phe Trp Leu Ala Gly Asn Val Leu  
 35 40 45  
 Ile Asp Arg Gly Asn Ala His Lys Ala Arg Arg Ser Met Leu Thr Thr  
 50 55 60  
 Thr His Thr Leu Gln His Lys Asp Thr Ser Ile Trp Val Phe Ala Glu  
 65 70 75 80  
 Gly Thr Arg Asn Phe Gly Glu Thr Leu Leu Pro Phe Lys Lys Gly Ala  
 85 90 95  
 Phe Gln Met Ala Ile Ala Ala Gly Val Pro Ile Val Gln Val Cys Val  
 100 105 110  
 Ser Thr Tyr Val Lys His Met Lys Leu Asn Arg Trp Asp Ser Gly Asp  
 115 120 125  
 Ile Leu Ile Arg Ser Leu Pro Pro Ile Pro Thr Thr Gly Leu Thr Leu  
 130 135 140  
 Asp Asp Met Pro Arg Leu Met Glu Thr Cys Arg Gln Gln Met Arg Glu  
 145 150 155 160  
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 Glu Leu Ala Arg Glu Gly Arg  
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<210> 1311  
 <211> 674  
 <212> DNA  
 <213> Homo sapiens

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<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

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Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
	50					55					60				
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
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Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85					90						95	
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
		100						105					110		
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
	115						120					125			
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
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Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
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Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165					170						175	
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
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Gln	Val	Pro	Ala												

195

<210> 1313  
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 <213> Homo sapiens

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 240  
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<210> 1314  
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 <212> PRT  
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<400> 1314  
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 Lys Phe Ser Val Ser Lys Thr Gly Leu Ser Thr Cys Pro Ala Asn Leu  
 35 40 45  
 Ser Ser Ser Arg Ala Pro Leu Ala Lys Thr Pro Leu Ser Thr Ser  
 50 55 60  
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro  
 65 70 75 80  
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro  
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<210> 1315  
 <211> 5245  
 <212> DNA  
 <213> Homo sapiens

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Ser  Ala Ile Ala Pro Phe Ser Ser Asp Ser Pro Arg Pro Thr His Pro
      325              330              335
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      340              345              350
Gln  Arg Thr Pro Arg Pro Asn Glu Leu Lys Ile Thr Pro Leu Asn Arg
      355              360              365
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Phe  Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe
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Gly  Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu
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Val  Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly
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His  Asn Pro Glu Glu Lys Glu Ile Lys Pro Phe Glu Ser Thr Val Ser
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Glu  Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn
      450              455              460
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Pro  Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser
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Ile  Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu
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&lt;210&gt; 1317

&lt;211&gt; 1123

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1317

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240
ctggcaacaa cgggtgcctga gagcgcagag cctgaggcag aggcggacgg ggaggagctg
300
gacggcagcg acatgtcagc catcatctat gaaatcccca aggagcctga gaagaggcgg
360
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420
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480
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540
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600
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660
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720
ctcaactggc acatgaagaa gcacactgcg gaggtgcagt acaacttcac gtgcgatgcc
780
tgcgggaagc gcttcgagaa gctggacagc gtcaagttcc acacgctcaa aagccaccgg
840

```

gatcacaagc ccacctgacc cacctgacca ctgaccgccc ctatttattc gtccgctcgg  
 900  
 acaccacagc ccgggcttgc cggggcctgg acagctgcga gggccggccg gaccgcgggc  
 960  
 cggaaggagc gccccgccc cgccccagag ctggcgcccc tgggcaggtt cccaccccg  
 1020  
 cccacccgca tccttctcgg agctggtgcc tggggctgca ttgctggaac tgtgtcaaga  
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<210> 1318  
 <211> 285  
 <212> PRT  
 <213> Homo sapiens

<400> 1318  
 Xaa Ala Glu Gly Ile His Leu Asn Met Ala Ala Gly Ser Gly Val Pro  
 1 5 10 15  
 Gly Ser Gly Leu Gly Glu Glu Val Pro Cys Ala Met Met Glu Gly Val  
 20 25 30  
 Ala Ala Tyr Thr Gln Thr Glu Pro Glu Gly Ser Gln Pro Ser Thr Met  
 35 40 45  
 Asp Ala Thr Ala Val Ala Gly Ile Glu Thr Lys Lys Glu Lys Glu Asp  
 50 55 60  
 Leu Cys Leu Leu Lys Lys Glu Glu Lys Glu Glu Pro Val Ala Pro Glu  
 65 70 75 80  
 Leu Ala Thr Thr Val Pro Glu Ser Ala Glu Pro Glu Ala Glu Ala Asp  
 85 90 95  
 Gly Glu Glu Leu Asp Gly Ser Asp Met Ser Ala Ile Ile Tyr Glu Ile  
 100 105 110  
 Pro Lys Glu Pro Glu Lys Arg Arg Arg Ser Lys Arg Ser Arg Val Met  
 115 120 125  
 Asp Ala Asp Gly Leu Leu Glu Met Phe His Cys Pro Tyr Glu Gly Cys  
 130 135 140  
 Ser Gln Val Tyr Val Ala Leu Ser Ser Phe Gln Asn His Val Asn Leu  
 145 150 155 160  
 Val His Arg Lys Gly Lys Thr Lys Val Cys Pro His Pro Gly Cys Gly  
 165 170 175  
 Lys Lys Phe Tyr Leu Ser Asn His Leu Arg Arg His Met Ile Ile His  
 180 185 190  
 Ser Gly Val Arg Glu Phe Thr Cys Glu Thr Cys Gly Lys Ser Phe Lys  
 195 200 205  
 Arg Lys Asn His Leu Glu Val His Arg Arg Thr His Thr Gly Glu Thr  
 210 215 220  
 Pro Leu Gln Cys Val Ile Cys Gly Tyr Gln Cys Arg Gln Arg Ala Ser  
 225 230 235 240  
 Leu Asn Trp His Met Lys Lys His Thr Ala Glu Val Gln Tyr Asn Phe  
 245 250 255  
 Thr Cys Asp Ala Cys Gly Lys Arg Phe Glu Lys Leu Asp Ser Val Lys  
 260 265 270  
 Phe His Thr Leu Lys Ser His Pro Asp His Lys Pro Thr  
 275 280 285

<210> 1319  
 <211> 538  
 <212> DNA  
 <213> Homo sapiens

<400> 1319  
 cgggagcgga gccagctct tggctggtga tgaggcctg gaagcagatg gcctctcagt  
 60  
 cctccatttg ggaggactcc caaaatagtg caggctcgag ggggtgggga atggctcctg  
 120  
 ctgaatgtgt gaatgggtcc ctgggtgctt tccttcctct gggagctccg tgggagagt  
 180  
 gagtcatgca caagtcagag agcagttggg gaggaaccca gaagccctgg gatggtgtct  
 240  
 gcatgggaat gtgtagggag gcagccacaa tgggcctggg ccttcctttc tctccttct  
 300  
 gtccccctcc cccatcccc tctctcctcc ctctcttctg gaaacccagt actgggggaa  
 360  
 acacacacag gtgggatgca ggtatccggg aagctcatag aagctgccac gctgctggag  
 420  
 tttgcctcat acaggagcgt gggcatgccc cgcgtggagt tgtgctgtgt gtgtgcatat  
 480  
 gtatggttgt gtgtgcatgg ggggtggggga ttctgacctg gggtcactcc caaagctt  
 538

<210> 1320  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 1320  
 Met Arg Ala Trp Lys Gln Met Ala Ser Gln Ser Ser Ile Trp Glu Asp  
 1 5 10 15  
 Ser Gln Asn Ser Ala Gly Ser Arg Gly Trp Gly Met Ala Pro Ala Glu  
 20 25 30  
 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp  
 35 40 45  
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln  
 50 55 60  
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr  
 65 70 75 80  
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser  
 85 90 95  
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr  
 100 105 110  
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala  
 115 120 125  
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val  
 130 135 140  
 Val Leu Cys Val Cys Ile Cys Met Val Val Cys Ala Trp Gly Trp Gly  
 145 150 155 160  
 Ile Leu Thr Trp Gly His Ser Gln Ser  
 165

<210> 1321  
<211> 1292  
<212> DNA  
<213> Homo sapiens

<400> 1321  
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120  
cgcccggatc gctcacggta cgcaacgcag aagcagggat cgctcagacc cgggcacgtc  
180  
atcgtcaaga agatttataa caacaatgtc cttctcggcg tcaacggttc ggggaccgaa  
240  
atggtcgtca atgctcgcgg tatcgccctac ggacgcacacc gcggggagat cgtcgatgcc  
300  
tcgtcggccc agcgatatgt cgcagagggg gcctatcgca cgaccgccat cgcatactg  
360  
ctaacgaacg ccaactcacac cgaggtgcga gtggcacagg caatcgtcga attggcgcg  
420  
gaagagctgg gcaactccca tgcccgacgg atgatgctgc ccatacctga tcacctcgtc  
480  
gcagctgtgc accgagctaa gcagggggcc gtcacgcatt tccccctgga atgggaagtc  
540  
cgtcagctct atcccgatga ggcggaactg ggccgcgcgc ctgctcgaaat cgtcgacggt  
600  
gctctcgaaa tccatttgca acccgaggaa tgggtggcat tctccctgca cttcatcaat  
660  
cagcgggtggg acagtagaga cgtttcgcgg accatgtcga tgactcagac gatctgcgac  
720  
gttttcaccg agctggagga cctgtggcac gttgagatcg accgttcgtc catgagcgca  
780  
tcccgttcg tcaaccacct tcgctatctg ttcgctcggg cctcggacaa caagcagctc  
840  
tctcacgttg acctggacat tgtgggactc atgtcagatc gctaccaga agccacattg  
900  
gcagctagcc aagtggccga gcacatatcg aaagcaatcg gcaacgcact gacggaagcc  
960  
gaaatcaact acatcgccct acacaccacc cggctctaca acgaggtgat ggggatggat  
1020  
gactgacgat cgcgcacctg ttaaggctca tcggtagtgg gcaatacaca aaatggcgat  
1080  
gaccttcctg ccggaaagcc agcaccaaag tcaccagat caaaattcag atgcgtgcct  
1140  
aattcccacc ccgacatcca agaggtcagg ggggggttgt tgggggtggg ggggtggggg  
1200  
ggggggggtt gcatgctcag ggggtggggc tttgttgaag ccatcatgaa gttgcaaacc  
1260  
caggactgtt ccactagtaa agcccctgcc tt  
1292

<210> 1322  
<211> 317  
<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 1322

```

Met Ile Arg Arg Gln Cys Ser Gln Ser Pro Gln Asp Asp Pro Val Gln
 1           5           10           15
Arg Pro Asp Arg Ser Arg Tyr Ala Thr Thr Lys Gln Gly Ser Leu Arg
      20           25           30
Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
      50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
Ile Gly Asn Asp Leu Thr Glu Ala Glu Ile Asn Tyr Ile Ala Leu His
      290          295          300
Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
305          310          315

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&lt;210&gt; 1323

&lt;211&gt; 306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1323

```

cgcgatgatgg gaatgcgtca ctatgatgtt cagttgattg gtggtatcac tctgcacgaa
60
ggcaaaattg ctgagatgcg tacaggtgaa ggtaaaaccc tgatgggtac tttagcgtgt
120

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tacctcaatg cattgagtgg tcagggtgtg catgtcatca ccgccaatga ctatcttgca  
 180  
 caacgtgatg ctgaactcaa ccgcccatta tttagagtttt tgggtttaag catcgggtgtg  
 240  
 atttattcga tgcaaatgcc tgctgagaaa gcacaagctt atttagcaga cttactttac  
 300  
 ggtacc  
 306

<210> 1324  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 1324  
 Arg Val Met Gly Met Arg His Tyr Asp Val Gln Leu Ile Gly Gly Ile  
 1 5 10 15  
 Thr Leu His Glu Gly Lys Ile Ala Glu Met Arg Thr Gly Glu Gly Lys  
 20 25 30  
 Thr Leu Met Gly Thr Leu Ala Cys Tyr Leu Asn Ala Leu Ser Gly Gln  
 35 40 45  
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala  
 50 55 60  
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val  
 65 70 75 80  
 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala  
 85 90 95  
 Asp Ile Thr Tyr Gly Thr  
 100

<210> 1325  
 <211> 391  
 <212> DNA  
 <213> Homo sapiens

<400> 1325  
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 attgtcgccg catgttccgt ctccgctcat gccggaagct ggccagagaa accgatcacg  
 120  
 atggtcgtgc cgtttcccg cggaggcggc accgatctcg tggcgcgctc gatccagccg  
 180  
 cttttgcagc gcgaactcgg acaaccggtg gtgacgcaca accgcagcgg cgcaggcggc  
 240  
 acgctcggct ccagcttcgt ggcgcggggc gttgccgacg gctacacggc tggcgtggtc  
 300  
 accacgagca cccacgcggt aagcgtcgcg ctctatcccc ggctggccta caaccgcaga  
 360  
 gcggactttg catacgccgg cttcatcggc n  
 391

<210> 1326  
 <211> 130  
 <212> PRT

<213> Homo sapiens

<400> 1326

```

Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
 1           5           10           15
Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
      20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
      35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
      50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
      85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
      100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
      115          120          125
Ile Gly
      130

```

<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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nnacgcgtga tttcggaact gcagcagttc gagcagtcgc atggacagag cgacgggagc
60
tactggctat ggttcgagct gctgtggcga gactatttcc gctttctgca tcttcggcat
120
ggcgctcggc tgtaccgcgc acgcggcctc gcaaattgagg tacggcacgc ggagcgccca
180
gatgtgcagg gcttcgagcg ctggcgctcgt gcatcgaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

```

<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

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Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
      20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
      35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

```

50                      55                      60  
 Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala  
 65                      70                      75                      80  
 Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg  
                     85                      90                      95  
 Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly  
                     100                      105

<210> 1329

<211> 438

<212> DNA

<213> Homo sapiens

<400> 1329

ngtgcacgct tagcattaga tttagcttcc agtggcaaaa ctacgtcggt gatttcaagc  
 60  
 ggcgatatcg gcatttacgc gatggcgacc ctggtgtttg aactgctgga tagacaactc  
 120  
 cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc  
 180  
 tctgcaatgc aagctgggtgc aagtcgtatt ggtgcatgt taggtcatga cttttgtacg  
 240  
 gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgca  
 300  
 ggtgaggggg attttggtat ctctttttat aaccctgttt ctaagaaacg tgattggcag  
 360  
 cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta  
 420  
 ggtcgtcagt tgacgcgt  
 438

<210> 1330

<211> 146

<212> PRT

<213> Homo sapiens

<400> 1330

Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser  
 1                      5                      10                      15  
 Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val  
                     20                      25                      30  
 Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu  
                     35                      40                      45  
 Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln  
                     50                      55                      60  
 Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr  
 65                      70                      75                      80  
 Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg  
                     85                      90                      95  
 Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro  
                     100                      105                      110  
 Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu  
                     115                      120                      125  
 Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

130 135 140  
 Thr Arg  
 145  
  
 <210> 1331  
 <211> 453  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 1331  
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 catcttcttg cccggcatcgg acgcatcgaa tccgggtcacg ccaacggcgg caagacgacc  
 120  
 tcgggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacggacg gctggcaggc  
 180  
 aacgaagtca ttcggggacac cgacaagggc aatcgacggc gaccactca cgaccgcgcc  
 240  
 gtcggggccga tgcagttcat tccggccacc tgggcccggat atgccagcga cggcaacggg  
 300  
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc  
 360  
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac  
 420  
 aacaactcgg ccgcttacgc agcaaacgtg atc  
 453  
  
 <210> 1332  
 <211> 151  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 1332  
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys  
 1 5 10 15  
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly  
 20 25 30  
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro  
 35 40 45  
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile  
 50 55 60  
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala  
 65 70 75 80  
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser  
 85 90 95  
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala  
 100 105 110  
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg  
 115 120 125  
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala  
 130 135 140  
 Ala Tyr Ala Ala Asn Val Ile  
 145 150

<210> 1333  
 <211> 540  
 <212> DNA  
 <213> Homo sapiens

<400> 1333  
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 ggcacagctc gtcgggtcaag atgggtctag tgctgctcgt atggcgggcg aggcacccgc  
 120  
 gcgaagggct aaagcggatg gactaagcca gcttgatcatc gatgtcaatg gagacgccgt  
 180  
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga  
 240  
 agtacacggg cgggcgagcg aaatgtgtat tttgctgggt cgctgaggcc gttgcagcga  
 300  
 tacaatgatg aggtgtctaa gtattttccg gtccaccgag agaaccgcga gcagcgttct  
 360  
 ctcaatcaga tcgtcgacat cctgcaccat ggcggtctta tcgcctaccc gacagacacg  
 420  
 gggttatgct tcggtgcccg gntaggggaat aaggatgccg tggaccggat tcgcaaactt  
 480  
 cgccagttat ttgacaagca tcacttcacc ctgggtcatga gccagtttgc gcaggttggc  
 540

<210> 1334  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 1334  
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp  
 1 5 10 15  
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr  
 20 25 30  
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg  
 35 40 45  
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser  
 50 55 60  
 Gln Phe Ala Gln Val Gly  
 65 70

<210> 1335  
 <211> 748  
 <212> DNA  
 <213> Homo sapiens

<400> 1335  
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 gtgaatgccca agaagaagcg tcgtgaggtc ctcgatcagg cctccgggta ccgtgggtcag  
 120  
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcgttc  
 180

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<400> 1337
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60
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aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg  
 120  
 gcctcttgcc tcatggtcag tgtgggtcag tgctttcgct gtatgagact acagggtttc  
 180  
 tctgcctcac catgggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg  
 240  
 ggcactgcag gatgtggggc agggctccta cgtgccagct accagatgcc agcagcaccc  
 300  
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtcagagtg  
 360  
 gccc  
 364

<210> 1338  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 1338  
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala  
 1 5 10 15  
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu  
 20 25 30  
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu  
 35 40 45  
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu  
 50 55 60  
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr  
 65 70 75 80  
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala  
 85 90 95

<210> 1339  
 <211> 653  
 <212> DNA  
 <213> Homo sapiens

<400> 1339  
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 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct  
 120  
 ccggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg  
 180  
 gacgtgtggc agccggggcc aggcctgag attatcctta atctgccggc taccgtcgag  
 240  
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat  
 300  
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgac gtggcacggc gatcgcgggc  
 360  
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc  
 420  
 gagcgcccgg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccaggagatt  
 480



gacgccggta tcgacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc  
 540  
 tgtctgccag taccggcccc ccagccctac tccggcgatc tggctctcac cgccttctcc  
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<210> 1340  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<400> 1340  
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 20 25 30  
 Val Glu Phe Gly Tyr Glu Tyr Ser Pro Glu Met Phe Ser Gln Thr Arg  
 35 40 45  
 Thr Asp Phe Ala Ile Asp Val Cys His Ser Val Met Asp Val Trp Gln  
 50 55 60  
 Pro Gly Pro Gly Arg Glu Ile Ile Leu Asn Leu Pro Ala Thr Val Glu  
 65 70 75 80  
 Met Ser Thr Pro Asn Thr Tyr Ala Asp Gln Ile Glu Tyr Phe Cys Arg  
 85 90 95  
 Asn Ile Arg Asp Arg Glu His Val Cys Val Ser Leu His Pro His Asn  
 100 105 110  
 Asp Arg Gly Thr Ala Ile Ala Ala Glu Phe Ala Gln Met Ala Gly  
 115 120 125  
 Ala Asp Arg Val Glu Gly Cys Phe Phe Gly Pro Gly Glu Arg Pro Gly  
 130 135 140  
 Thr Val Asp Leu Val Thr Leu Gly Met Asn Leu Val Ser Gln Gly Val  
 145 150 155 160  
 Asp Ala Gly Ile Asp Phe Ser Asp Met Pro Lys Ile Arg Arg Thr Val  
 165 170 175  
 Glu Tyr Cys Thr Cys Leu Pro Val Pro Ala Arg Gln Pro Tyr Ser Gly  
 180 185 190  
 Asp Leu Val Phe Thr Ala Phe Ser Gly Ser His Gln Asp Ala Ile Lys  
 195 200 205  
 Lys Gly Leu Glu Asp Leu Ala Arg Arg  
 210 215

<210> 1341  
 <211> 666  
 <212> DNA  
 <213> Homo sapiens

<400> 1341  
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 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc  
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct  
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 360  
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 420  
 caagcccagag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca  
 480  
 cgtcgtcgct gccactccc caggatacct cgtaaagcga caaacagagg atgtgcagat  
 540  
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<210> 1342

<211> 209

<212> PRT

<213> Homo sapiens

<400> 1342

Met	Ser	Ser	Asp	Ser	Ile	Val	Leu	Gln	Ser	Phe	Leu	Pro	Cys	Phe	Asp
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			20					25					30		
Glu	Lys	Leu	Ala	Lys	Lys	Gly	Leu	Trp	His	Ser	Phe	Leu	Leu	Leu	Ser
		35				40						45			
Ala	Lys	Lys	Asp	Arg	Leu	Pro	Arg	Asn	Ile	His	Val	Pro	Glu	Leu	Ser
	50					55					60				
Leu	Lys	Ser	Leu	Phe	Glu	Lys	Tyr	Val	Phe	Ile	Gly	Leu	Tyr	Glu	Lys
65					70					75				80	
Met	Glu	Gln	Val	Pro	Lys	Leu	Val	Gln	Trp	Leu	Ile	Ser	Ile	Gly	Ala
				85					90					95	
Ser	Val	Glu	Thr	Ile	Gly	Pro	Tyr	Pro	Leu	His	Ala	Leu	Met	Arg	Leu
			100					105					110		
Cys	Ile	Gln	Ala	Arg	Glu	Asn	His	Leu	Phe	Arg	Trp	Leu	Met	Asp	His
		115					120					125			
Lys	Pro	Glu	Trp	Lys	Gly	Arg	Ile	Asn	Gln	Lys	Asp	Gly	Asp	Gly	Cys
	130					135					140				
Thr	Val	Leu	His	Val	Val	Ala	Ala	His	Ser	Pro	Gly	Tyr	Leu	Val	Lys
145					150					155				160	
Arg	Gln	Thr	Glu	Asp	Val	Gln	Met	Leu	Leu	Arg	Phe	Gly	Ala	Asp	Pro
			165						170					175	
Thr	Leu	Leu	Asp	Arg	Gln	Ser	Arg	Ser	Val	Val	Asp	Val	Leu	Lys	Arg
		180						185					190		
Asn	Lys	Asn	Phe	Lys	Ala	Ile	Glu	Lys	Ile	Asn	Ser	His	Leu	Glu	Lys
	195						200						205		
Leu															

<210> 1343  
<211> 270  
<212> DNA  
<213> Homo sapiens

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120  
ttaaaatttt tctcaagtgc caatcagaat tgtttgaaaa cagcaggaaa cccaagggag  
180  
atgagacggt ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct  
240  
gtttctgaca acatgtttgt tcataacaac  
270

<210> 1344  
<211> 90  
<212> PRT  
<213> Homo sapiens

<400> 1344  
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1 5 10 15  
Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp  
20 25 30  
Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn  
35 40 45  
Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe  
50 55 60  
Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala  
65 70 75 80  
Val Ser Asp Asn Met Phe Val His Asn Asn  
85 90

<210> 1345  
<211> 402  
<212> DNA  
<213> Homo sapiens

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120  
cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg  
180  
tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc  
240  
aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc  
300  
gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag  
360

tacggtttccg gggtttgagac cgactcgtgt atcgccatt gc  
402

<210> 1346

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1346

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Val	Ser	Asn	Phe	Ser	Gly	Thr	Asp	Asn	Thr	Asp	Phe	Tyr	Asp	Pro	Thr
		20					25					30			
Lys	Ala	Asp	Asn	Arg	Leu	Thr	Tyr	Arg	Gln	Thr	Gly	Val	Val	Thr	Pro
	35					40					45				
Tyr	Ala	Gly	Ile	Val	Tyr	Asp	Leu	Asn	Asp	Ile	Trp	Ser	Val	Tyr	Thr
	50				55					60					
Ser	Tyr	Thr	Lys	Ile	Tyr	Lys	Pro	Gln	Asn	Ser	Lys	Asp	Ala	Asp	Arg
65				70				75						80	
Lys	Leu	Leu	Asp	Pro	Ile	Glu	Gly	Asp	Thr	Tyr	Glu	Ala	Gly	Leu	Lys
			85				90							95	
Ala	Ala	Phe	Phe	Asp	Gly	Arg	Leu	Asn	Ala	Ser	Phe	Ala	Ala	Phe	Arg
		100					105					110			
Ile	Glu	Gln	Asp	Asn	Val	Ala	Gln	Tyr	Val	Ser	Gly	Phe	Glu	Thr	Asp
	115				120							125			
Ser	Cys	Ile	Ala	His	Cys										
	130														

<210> 1347

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1347

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120  
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcggggagg  
180  
gcaccaaagc ggtcttgccg aaattgctg aggcagggga aggggcacgc tttctgaaaa  
240  
accccccaa accgattcca ggaagcccaa agggcgggccc ctctgcccgc agcactgcct  
300  
tcacgtttac ttccatcccg gcctcctcct tcccctaagg cttggcatgc aacatccctg  
360  
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415

<210> 1348

<211> 105

<212> PRT

<213> Homo sapiens

&lt;400&gt; 1348

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Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
          100          105

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&lt;210&gt; 1349

&lt;211&gt; 924

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1349

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gctcagacgg tcatgcgttc gatcgccgaa aagcttggcc ttccggtcat cgtaagccg
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gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttctcag
 180
gccgtcgcga acgcctatgc ctatgacgac atggttgtag tcgaggaatt cattgtgggc
 240
aacgaactcg caataggcat gatcacgacg tctgaaggca cgcgtgtgct gccagccgtc
 300
gagattcgcc ctgtcggtag tgtttatgat tattcagcga tgtacaccgg tggtagaca
 360
cgactaacag ctctgcaga cattagcgat acggcgggcc aaaccgacgac ggcgatggcc
 420
cgagtcgtgc aaaaggagct cgatttctcc gggatatctc gtgtcgatgc gatcgtggac
 480
gagtccggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
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gtcgatgacg tcgctcgcaa ccatggctga cagtgtgcac acgaggggct cgcgccacgc
 660
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 720
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 780
gcgtatcaac gagccagtga tcacctgga tgaggcgctt aagaaggcca gtgtcatggc
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 900
aggcacatcg tggccagtac gcgt
 924

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<210> 1350  
 <211> 209  
 <212> PRT  
 <213> Homo sapiens

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 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly  
 35 40 45  
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn  
 50 55 60  
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly  
 65 70 75 80  
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val  
 85 90 95  
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser  
 100 105 110  
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile  
 115 120 125  
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln  
 130 135 140  
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp  
 145 150 155 160  
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met  
 165 170 175  
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp  
 180 185 190  
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His  
 195 200 205  
 Gly

<210> 1351  
 <211> 398  
 <212> DNA  
 <213> Homo sapiens

<400> 1351  
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 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg  
 180  
 gccgcacgg acgcatcggc cctctttctc tgaaccgccc tgtttgcctc gctgctccag  
 240  
 ttcaagcaca ttacgtata cgtcgcgcgc gcgtactttg tgtacctgct gcgtgcgtac  
 300  
 atgctcccga gcatgccgac gtcgcgcatcg acggggagcg cggcgatcga tcgcaccatc  
 360

aagcttggcg cagcgacgct ggtgccttcc tgctgagc  
398

<210> 1352  
<211> 70  
<212> PRT  
<213> Homo sapiens

<400> 1352  
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Cys Thr Met Gly Asp Glu Thr Gln Asn Ala Leu Leu Leu Ser Ile Leu  
20 25 30  
Leu His Pro Gly Leu Leu Ile Val Asp His Ile His Phe Gln Tyr Asn  
35 40 45  
Gly Phe Leu Ile Arg Gly Pro Leu Tyr Arg Leu Gly Ala Arg Thr Asp  
50 55 60  
Ala Ser Ala Leu Phe Leu  
65 70

<210> 1353  
<211> 480  
<212> DNA  
<213> Homo sapiens

<400> 1353  
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accctcacac ccaccccacc ccagtcaca cggatcgtgc ggggcattgg acagcctcgg  
120  
ggcaacatgc tcctgggtggg tatcgggggc agcggacgcc agagtctggc ccgcttggct  
180  
tcattccatct gcgactacac caccttccag atcgagggtca ccaaacatta tcggaagcag  
240  
gagttccgag atgatatcaa gcgtctgtat cgccaggctg ggggtggagct caagaccacg  
300  
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360  
atcctcagct caggcgaggt gcccacattt ttcaggcctg atgaatttga agagatccag  
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tcgcatatca tagaccaggc ccgggtggag cagggtgcctg agtcacgga cagcctcttc  
480

<210> 1354  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 1354  
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20 25 30  
Val Arg Gly Ile Gly Gln Pro Arg Gly Asn Met Leu Leu Val Gly Ile

		35					40					45						
Gly	Gly	Ser	Gly	Arg	Gln	Ser	Leu	Ala	Arg	Leu	Ala	Ser	Ser	Ile	Cys			
	50					55					60							
Asp	Tyr	Thr	Thr	Phe	Gln	Ile	Glu	Val	Thr	Lys	His	Tyr	Arg	Lys	Gln			
65					70					75					80			
Glu	Phe	Arg	Asp	Asp	Ile	Lys	Arg	Leu	Tyr	Arg	Gln	Ala	Gly	Val	Glu			
				85					90					95				
Leu	Lys	Thr	Thr	Ser	Phe	Ile	Phe	Val	Asp	Thr	Gln	Ile	Ala	Asp	Glu			
			100					105					110					
Ser	Phe	Leu	Glu	Asp	Ile	Asn	Asn	Ile	Leu	Ser	Ser	Gly	Glu	Val	Pro			
		115					120					125						
His	Leu	Phe	Arg	Pro	Asp	Glu	Phe	Glu	Glu	Ile	Gln	Ser	His	Ile	Ile			
	130					135					140							
Asp	Gln	Ala	Arg	Val	Glu	Gln	Val	Pro	Glu	Ser	Ser	Asp	Ser	Leu	Phe			
145					150					155					160			

<210> 1355

<211> 1063

<212> DNA

<213> Homo sapiens

<400> 1355

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120					
ggccctgtga	gaccctgtcc	tccaccgect	ctttccttgt	gtccattccc	tgagcctggg
180					
gaagttgcgt	cagagccaca	ggtcggngag	acgctgagtc	tgggcgagcg	cttgctgccg
240					
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300					
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360					
gatccccctt	cctgtgtacc	ccacaggctg	cagtgcacct	gccagcaca	cacctgcggg
420					
ggcacctgcg	accgctgctg	ccccggcttc	aatcagcagc	cgtggaagcc	tgcgactgcc
480					
aacagtgcc	acgagtgcc	gtcctgtaac	tgctacggcc	atgccaccga	ctgttactac
540					
gaccctgagg	tggaccggcg	ccgcgccagc	cagagcctgg	atggcaccta	tcaggggtggg
600					
ggtgtctgta	tcgactgcc	gcaccacacc	gccggcgctc	actgtgagcg	ctgcctgccc
660					
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720					
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780					
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900					
attgtgaatt	gtgactgcag	cgcggcaggg	accaggggca	acgcctgccg	gaaggaccca
960					



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1020

ccagggttct acggccccgg ctgccttggg tcccttcacg cgt

1063

<210> 1356

<211> 244

<212> PRT

<213> Homo sapiens

<400> 1356

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Pro	His	Arg	Leu	Gln	Cys	Thr	Cys	Gln	His	Asn	Thr	Cys	Gly	Gly	Thr
			20					25					30		
Cys	Asp	Arg	Cys	Cys	Pro	Gly	Phe	Asn	Gln	Gln	Pro	Trp	Lys	Pro	Ala
			35				40					45			
Thr	Ala	Asn	Ser	Ala	Asn	Glu	Cys	Gln	Ser	Cys	Asn	Cys	Tyr	Gly	His
	50					55					60				
Ala	Thr	Asp	Cys	Tyr	Tyr	Asp	Pro	Glu	Val	Asp	Arg	Arg	Arg	Ala	Ser
65					70					75					80
Gln	Ser	Leu	Asp	Gly	Thr	Tyr	Gln	Gly	Gly	Gly	Val	Cys	Ile	Asp	Cys
			85					90						95	
Gln	His	His	Thr	Ala	Gly	Val	Asn	Cys	Glu	Arg	Cys	Leu	Pro	Gly	Phe
			100					105					110		
Tyr	Arg	Ser	Pro	Asn	His	Pro	Leu	Asp	Ser	Pro	His	Val	Cys	Arg	Arg
		115					120					125			
Cys	Asn	Cys	Glu	Ser	Asp	Phe	Thr	Asp	Gly	Thr	Cys	Glu	Asp	Leu	Thr
	130					135					140				
Gly	Arg	Cys	Tyr	Cys	Arg	Pro	Asn	Phe	Ser	Gly	Glu	Arg	Cys	Asp	Val
145					150					155					160
Cys	Ala	Glu	Gly	Phe	Thr	Gly	Phe	Pro	Ser	Cys	Tyr	Pro	Thr	Pro	Ser
			165					170					175		
Ser	Ser	Asn	Asp	Thr	Arg	Glu	Gln	Val	Leu	Pro	Ala	Gly	Gln	Ile	Val
		180					185						190		
Asn	Cys	Asp	Cys	Ser	Ala	Ala	Gly	Thr	Gln	Gly	Asn	Ala	Cys	Arg	Lys
	195						200					205			
Asp	Pro	Arg	Val	Gly	Arg	Cys	Phe	Ala	Asn	Pro	Asn	Phe	Gln	Gly	Thr
	210					215					220				
His	Cys	Glu	Leu	Cys	Ala	Pro	Gly	Phe	Tyr	Gly	Pro	Gly	Cys	Pro	Gly
225					230					235					240
Ser	Leu	His	Ala												

<210> 1357

<211> 663

<212> DNA

<213> Homo sapiens

<400> 1357

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120

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 180  
 tgggtgtccgg gggttttcgt cggctctccc aaccatcatc tagacggcgt ggcatgtgg  
 240  
 tgcgagctgc ttgcggcggg gttctgtgcc cgagcttgcc tcgcctggct gcaagaatcc  
 300  
 ctggctcatc gagcttcagc gtcagtcaag tcgcaattgc ggcgcgacat cctgcaagcc  
 360  
 aggttgctgc gtcccactga cgcaacaatg ccgtcgagaa ccctcatcag cctgatgaca  
 420  
 acaggtctgg acgccctcga cggctactac tcgaagtacc ttcccagct tgtgctggcc  
 480  
 gtcacgtgac cagcagtgct agccaccgct atcggcctaa acgacctcac cagcctcgtc  
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 600  
 gaggcggccg tagcaaaacg gttcaaggta gccacccgac tggccaacca cttcgtctgat  
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 ctg  
 663

<210> 1358

<211> 221

<212> PRT

<213> Homo sapiens

<400> 1358

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Val	Asp	Arg	Tyr	Pro	Ser	Trp	Ser	Ser	Trp	Ser	Ile	Tyr	Gly	Pro	Arg
		20					25						30		
Cys	Gly	Phe	Gly	Thr	Glu	Val	Glu	Phe	Asn	Thr	Pro	Val	Leu	Pro	Val
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Val	Ile	Val	Pro	Ala	Val	Leu	Ala	Thr	Ala	Ile	Gly	Leu	Asn	Asp	Leu
			165					170						175	
Thr	Ser	Leu	Val	Ile	Val	Val	Val	Thr	Ile	Pro	Leu	Ile	Pro	Val	Phe
		180						185					190		
Met	Ala	Leu	Ile	Gly	Trp	Arg	Thr	Glu	Ala	Ala	Val	Ala	Lys	Arg	Phe
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Asp Val Phe Tyr Pro Leu Trp Glu Asp Asp Tyr Val Val Ala Met Pro  
35 40 45  
Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile  
50 55 60  
Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser  
65 70 75 80  
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<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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Gln	Arg	Cys	Leu	Pro	Val	Phe	Glu	Asn	Ala	Ala	Phe	Gly	Arg	Leu	Ala
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Gln	Ala	Ser	His	Thr	Cys	Gly	Ser	Pro	Pro	Glu	Asp	Phe	Cys	Pro	His
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Asp	Pro	Gln	Arg	His	His	Asn	Ala	Ser	Tyr	Leu	Thr	Asp	Phe	His	Ser
				85					90					95	
Gln	Asp	Glu	Ser	Thr	Trp	Trp	Gln	Ser	Pro	Ser	Met	Ala	Phe	Gly	Val
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Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
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Glu	Ile	Thr	Tyr	Val	Arg	Leu	Lys	Phe	His	Thr	Ser	Arg	Pro	Glu	Ser
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Phe	Ala	Ile	Tyr	Lys	Arg	Ser	Arg	Ala	Asp	Gly	Pro	Trp	Glu	Pro	Tyr
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Gln	Phe	Tyr	Ser	Ala	Ser	Cys	Gln	Lys	Thr	Tyr	Gly	Arg	Pro	Glu	Gly
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Gln	Tyr	Leu	Arg	Pro	Gly	Glu	Asp	Glu	Arg	Val	Ala	Phe	Cys	Thr	Ser
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Glu	Phe	Ser	Asp	Ile	Ser	Pro	Leu	Ser	Gly	Gly	Asn	Val	Ala	Phe	Ser
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Thr	Leu	Glu	Gly	Arg	Pro	Ser	Ala	Tyr	Asn	Phe	Glu	Glu	Ser	Pro	Gly
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Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
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Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

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Cys	Asn	Gly	His	Ala	Ser	Glu	Cys	Gly	Pro	Asp	Val	Ala	Gly	Gln	Leu		
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Ala	His	Glu	Cys	Leu	Pro	Cys	Asn	Cys	Ser	Gly	Arg	Ser	Glu	Glu	Cys		
				325					330					335			
Thr	Phe	Asp	Arg	Glu	Leu	Phe	Arg	Ser	Thr	Gly	His	Gly	Gly	Arg	Cys		
		340						345				350					
His	His	Cys	Arg	Asp	His	Thr	Ala	Gly	Pro	His	Cys	Glu	Arg	Cys	Gln		
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Glu	Asn	Phe	Tyr	His	Trp	Asp	Pro	Arg	Met	Pro	Cys	Gln	Pro	Cys	Asp		
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Cys	Ala	Cys	Lys	Pro	Thr	Val	Thr	Gly	Trp	Lys	Cys	Asp	Arg	Cys	Leu		
			405					410					415				
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Asn	Pro	Ala	Gly	Ser	Leu	Asp	Thr	Cys	Asp	Pro	Arg	Ser	Gly	Arg	Cys		
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Pro	Cys	Lys	Glu	Asn	Val	Glu	Gly	Asn	Leu	Cys	Asp	Arg	Cys	Arg	Pro		
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465				470				475						480			
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Cys	Ser	Cys	Pro	Thr	Gly	Tyr	Thr	Gly	Gln	Phe	Cys	Glu	Ser	Cys	Ala		
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Ile Cys Val Cys Ser	His His Thr Glu Gly	Pro Ser Cys Glu Arg Cys
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Leu Pro Gly Phe Tyr Gly	Asn Pro Phe Ala Gly	Gln Ala Asp Asp Cys
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Gln Pro Cys Pro Cys Pro	Gly Gln Ser Ala Cys	Thr Thr Ile Pro Glu
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Arg Cys Glu Val Cys Asp	Asp Gly Phe Phe Gly	Asp Pro Leu Gly Leu
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805	810	815
Asp Pro Asn Ala Val Gly	Asn Cys Asp Pro Leu	Ser Gly His Cys Leu
820	825	830
Arg Cys Leu His Asn Thr	Thr Gly Asp His Cys	Glu His Cys Gln Glu
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Gly Phe Tyr Gly Ser Ala	Leu Ala Pro Arg Pro	Ala Asp Lys Cys Met
850	855	860
Pro Cys Ser Cys His Pro	Gln Gly Ser Val Ser	Glu Gln Met Pro Cys
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Asp Pro Val Thr Gly Gln	Cys Ser Cys Leu Pro	His Val Thr Ala Arg
885	890	895
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Gly Cys Arg Ser Cys Lys	Cys His Pro Leu Gly	Ser Gln Glu Asp Gln
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Cys His Pro Lys Thr Gly	Gln Cys Thr Cys Arg	Pro Gly Val Thr Gly
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Gly Cys Arg Ala Cys Arg	Cys Ser Pro Leu Gly	Ala Ala Ser Ala Gln
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His Cys Gln Gln Cys Pro	Ser Cys Tyr Ala Leu	Val Lys Glu Glu Thr
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Ala Pro Arg Gly Asp Val	Tyr Gln Gly His His	Leu Leu Pro Gly Ala
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Arg Glu Ala Phe Leu Glu	Gln Met Met Gly Leu	Glu Gly Ala Val Lys
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Ala Ala Arg Glu Gln Leu	Gln Arg Leu Asn Lys	Gly Ala Arg Cys Ala
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Gln Ala Gly Ser Gln Lys	Thr Cys Thr Gln Leu	Ala Asp Leu Glu Ala
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Ser His Leu	Ala Ile Glu Ala Arg Ala Leu Ala Arg Ser His Arg Asp				
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Thr Ala Thr	Lys Ile Ala Ala Thr Ala Trp Arg Ala Leu Leu Ala Ser				
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Asn Thr Ser	Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala				
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Leu Glu Thr	Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala				
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Ala Gln Lys	Ala Leu Arg Thr Ala Val Ala Glu Val Leu Pro Glu Ala				
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Glu Ser Val	Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro				
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Tyr Leu Ala	Leu Leu Ala Ser Pro Gly Ala Leu Pro Gln Lys Ser Arg				
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Ala Glu Asp	Leu Gly Leu Lys Ala Lys Ala Leu Glu Lys Thr Val Ala				
	1265		1270		1275
Ser Trp Gln	His Met Ala Thr Glu Ala Ala Arg Thr Leu Gln Thr Ala				
	1285		1290		1295
Ala Gln Ala	Thr Leu Arg Gln Thr Glu Pro Leu Thr Met Ala Arg Ser				
	1300		1305		1310
Arg Leu Thr	Ala Thr Phe Ala Ser Gln Leu His Gln Glu Ala Arg Ala				
	1315		1320		1325
Ala Leu Thr	Gln Ala Ser Ser Ser Val Gln Ala Ala Thr Val Thr Val				
	1330		1335		1340
Met Gly Ala	Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln				
	1345		1350		1355
Phe Pro Arg	Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser				
	1365		1370		1375
Val Ser Asp	Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala				
	1380		1385		1390
Glu Arg Met	Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys				
	1395		1400		1405
Lys Gly Arg	Glu Ala Glu Val Leu Ala Lys Asp Ser Ala Lys Leu Ala				
	1410		1415		1420
Lys Ala Leu	Leu Arg Glu Arg Lys Gln Ala His Arg Arg Ala Ser Arg				
	1425		1430		1435
Leu Thr Ser	Gln Thr Gln Ala Thr Leu Gln Gln Ala Ser Gln Gln Val				
	1445		1450		1455
Leu Ala Ser	Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val				
	1460		1465		1470
Gly Ala Gly	Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile				
	1475		1480		1485
Ser Leu Glu	Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu				
	1490		1495		1500
Gly Ser Leu	Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr				
	1505		1510		1515
Gln Trp Ala	Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser				
	1525		1530		1535
Leu Gln Arg	Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Glu				
	1540		1545		1550
Leu Gln Ile	Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp				

1555 1560 1565  
 Lys Gln Asn Leu Glu Ala Ile Leu His Ser Leu Pro Glu Asn Cys Ala  
 1570 1575 1580  
 Ser Trp Gln  
 1585

<210> 1363  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1363  
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 120  
 ggaatctgcg aaaccgacaa agatgcgggt gtttgagtgg atgtgaagga agatgcagggt  
 180  
 gtctcatcgg cggggccacc atgaacaacc cttcttgatg ccccgtaggt gacgcgctca  
 240  
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga  
 300  
 cccatgcact tgcgtgcctg gaggcattggc taccaggcaa tcccctcatt tccagaatga  
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 392

<210> 1364  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1364  
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 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu  
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 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu  
 35 40 45  
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro  
 50 55 60  
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu  
 65 70 75 80  
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu  
 85 90 95  
 Arg Leu Gln Trp Arg Leu Tyr Pro  
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<210> 1365  
 <211> 451  
 <212> DNA  
 <213> Homo sapiens

<400> 1365

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 tggcccaatg tcttcatagc tgagaagagt gtggctgtga acaaggggag gctgaagagg  
 180  
 ctgggaatca cccacattct gaatgctgcg catggcaccg gcgtttacac tggccccgaa  
 240  
 ttctacactg gcctggagat ccagtacctg ggtgtagagg tggatgactt tcctgaggtg  
 300  
 gacatttccc agcatttccg gaaggcgtct gagttcctgg atgaggcgct gctgacttac  
 360  
 agagggaaag tcctgggtcag cagcgaaatg ggcacagcc ggtcagcagt gctgggtggc  
 420  
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 451

&lt;210&gt; 1366

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1366

Xaa	Arg	Val	Arg	Glu	Lys	Met	Asp	Asp	Thr	Ser	Leu	Tyr	Asn	Thr	Pro
1				5					10					15	
Cys	Val	Leu	Asp	Leu	Gln	Arg	Ala	Leu	Val	Gln	Asp	Arg	Gln	Glu	Ala
			20					25					30		
Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35					40					45			
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
		50				55					60				
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
65					70					75				80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85					90						95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
		100						105					110		
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
		115					120					125			
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
	130					135					140				
Ile	Phe	His	Asn	Met	Ala										
145					150										

&lt;210&gt; 1367

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1367

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 cgccgatacg cgccaacgcc gtagaccgcg aacgctggct caccggcgcc gctgtactgc  
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tctgtctgcg attgctgctg gtcacgtctg cactgcccgt cagcgcactc gtcggccaga  
 180  
 gcttcttcga ccgcgaagge gccttcgtcg gcctcgccaa cttegtctgc tacctcgaca  
 240  
 accccgccct ggtccagtcc gccttcaaca gcctctggct ggccgcgac agcggcgtca  
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 tctgcaccgc catcgcttac gtctacgct  
 330

<210> 1368  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 1368  
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 Cys Cys Trp Ser Ser Ser His Cys Pro Ser Ala His Ser Ser Ala Arg  
 20 25 30  
 Ala Ser Ser Thr Ala Lys Ala Pro Ser Ser Ala Ser Pro Thr Ser Leu  
 35 40 45  
 Ala Thr Ser Thr Thr Pro Pro Trp Ser Ser Pro Pro Ser Thr Ala Ser  
 50 55 60  
 Gly Trp Pro Arg Ser Ala Pro Ser Ser Ala Pro Pro Ser Pro Thr Ser  
 65 70 75 80  
 Thr Arg

<210> 1369  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

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 120  
 cccctggacc cctacagcca ggagcagcgg gagcagctgc aggtcctacg ccaggctgcc  
 180  
 ttcgaggtgg agggggagtc ctcggttgcc gggctaagtg ctgaccgtcg ccgttcctc  
 240  
 tgtgcccag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag  
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 356

<210> 1370  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1370  
 Met Gly Asp Glu Met Ala His His Leu Tyr Val Leu Gln Ala Leu Met

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1           5           10           15
Leu Gly Leu Leu Glu Pro Arg Met Arg Thr Pro Leu Asp Pro Tyr Ser
20           25           30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
35           40           45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
50           55           60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
65           70           75           80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
85           90           95
Asn Met Leu Tyr Phe Ser Arg Asn
100

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<210> 1371  
 <211> 648  
 <212> DNA  
 <213> Homo sapiens

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120
cttatagaga agacatgttc caagtaccct ctttcctttg tctgcttttc tcatgggtac
180
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240
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300
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360
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420
ttaagttata cctacaataa aagaccagc ctagcccat ggctgaatgt tgaatactgt
480
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540
tatacctgga aatattcgga acattctatt agcagaaatg caatgtagga agcttattgg
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648

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<210> 1372  
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 <212> PRT  
 <213> Homo sapiens

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<400> 1372
Met Phe Gln Val Pro Ser Phe Leu Cys Leu Leu Phe Ser Trp Val Leu
1           5           10           15
Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Leu Ser Leu
20           25           30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

```

35	40	45
Cys Leu Gly His Leu Arg	Ala Trp Lys Val His	Ala Leu Thr Arg Val
50	55	60
Met Thr Thr Ile Ser Pro	Lys Leu Ser Ser Cys His	Pro Ile Gly Ser
65	70	75
Ile Asp Gln Lys Gly Lys	Ser Ser Val Leu Lys	Leu Ile Asn Gln Leu
85	90	95
Lys Leu Tyr Leu Gln		
100		

<210> 1373  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 1373  
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 120  
 acatgggttt catgggtcga catgggttcc gtgtcctgct tgccgggcct gagctgtttg  
 180  
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 240  
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 369

<210> 1374  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1374
Met Ala Glu Asn Phe Phe His His Asn Leu Arg Val Thr Gly Ser Tyr
1 5 10 15
Met Gly Phe Met Gly Arg His Gly Phe Arg Val Leu Leu Ala Gly Pro
20 25 30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
35 40 45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
50 55 60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
65 70 75 80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
85 90 95
Leu Arg

<210> 1375  
 <211> 282

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1375

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60  
ggctggcact ggccccgctt caacatcgct gacatggcca tcgtggggcgg ggcgatcgcg  
120  
ctggtggccc agtcgttcat gagcgtggag aaccgggccg ccacaaagga gtcccagtga  
180  
cattgggacg atccggaaat tcgcaatgca cacggtgcag gacaccaatc tgaagagaac  
240  
ggccccccagc atgagcggcc gcggcttggc cctcatgcta gc  
282

&lt;210&gt; 1376

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1376

Xaa	Ala	Phe	Asp	Arg	Ala	Thr	Arg	Gly	His	Val	Ile	Asp	Tyr	Ile	Asp
1				5				10				15			
Phe	His	Leu	His	Gly	Trp	His	Trp	Pro	Ala	Phe	Asn	Ile	Ala	Asp	Met
			20					25				30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
		35					40					45			
Val	Glu	Asn	Pro	Ala	Ala	Thr	Lys	Glu	Ser	Gln					
	50						55								

&lt;210&gt; 1377

&lt;211&gt; 6306

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1377

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120  
atggcggtggg acatgtgcaa ccaggactct gagtctgtat ggagtgcacat cgagtgtgct  
180  
gctctgggttg gtgaagacca gcctctttgc ccagatcttc ctgaacttga tctttctgaa  
240  
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300  
caatcagaaa taatatccaa tcagtacaac aatgagcctt caaacatatt tgagaagata  
360  
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420  
gtggatgaag acggattgcc ctcatattgat gcgctgacag atggagacgt gaccactgac  
480  
aatgaggcta gtccttcctc catgcctgac ggcaccctc caccacagga ggcagaagag  
540



ccgtctctac ttaagaagct cttactggca ccagccaaca ctcagctaag ttataatgaa  
600  
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660  
gcaattgtta agactgagaa ttcattggagc aataaagcga agagtatttg tcaacagcaa  
720  
aagccacaaa gacgtccctg ctctggagctt ctcaaataatc tgaccacaaa cgatgaccct  
780  
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900  
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2160

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&lt;210&gt; 1378

&lt;211&gt; 798

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1378

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Ile	Glu	Cys	Ala	Ala	Leu	Val	Gly	Glu	Asp	Gln	Pro	Leu	Cys	Pro	Asp
		20					25					30			
Leu	Pro	Glu	Leu	Asp	Leu	Ser	Glu	Leu	Asp	Val	Asn	Asp	Leu	Asp	Thr
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Asp	Ser	Phe	Leu	Gly	Gly	Leu	Lys	Trp	Cys	Ser	Asp	Gln	Ser	Glu	Ile
	50				55					60					
Ile	Ser	Asn	Gln	Tyr	Asn	Asn	Glu	Pro	Ser	Asn	Ile	Phe	Glu	Lys	Ile
65				70				75						80	
Asp	Glu	Glu	Asn	Glu	Ala	Asn	Leu	Leu	Ala	Val	Leu	Thr	Glu	Thr	Leu
			85				90						95		
Asp	Ser	Leu	Pro	Val	Asp	Glu	Asp	Gly	Leu	Pro	Ser	Phe	Asp	Ala	Leu
		100					105					110			
Thr	Asp	Gly	Asp	Val	Thr	Thr	Asp	Asn	Glu	Ala	Ser	Pro	Ser	Ser	Met

115	120	125
Pro Asp Gly Thr Pro Pro Pro Gln Glu Ala Glu Glu Pro Ser Leu Leu		
130	135	140
Lys Lys Leu Leu Leu Ala Pro Ala Asn Thr Gln Leu Ser Tyr Asn Glu		
145	150	155
Cys Ser Gly Leu Ser Thr Gln Asn His Ala Asn His Asn His Arg Ile		160
	165	170
Arg Thr Asn Pro Ala Ile Val Lys Thr Glu Asn Ser Trp Ser Asn Lys		175
	180	185
Ala Lys Ser Ile Cys Gln Gln Gln Lys Pro Gln Arg Arg Pro Cys Ser		190
	195	200
Glu Leu Leu Lys Tyr Leu Thr Thr Asn Asp Asp Pro Pro His Thr Lys		205
	210	215
Pro Thr Glu Asn Arg Asn Ser Ser Arg Asp Lys Cys Thr Ser Lys Lys		220
225	230	235
Lys Ser His Thr Gln Ser Gln Ser Gln His Leu Gln Ala Lys Pro Thr		240
	245	250
Thr Leu Ser Leu Pro Leu Thr Pro Glu Ser Pro Asn Asp Pro Lys Gly		255
	260	265
Ser Pro Phe Glu Asn Lys Thr Ile Glu Arg Thr Leu Ser Val Glu Leu		270
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Ser Gly Thr Ala Gly Leu Thr Pro Pro Thr Thr Pro Pro His Lys Ala		285
	290	295
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305	310	315
Lys Thr Val Val Pro Pro Pro Ser Lys Lys Pro Arg Tyr Ser Glu Ser		320
	325	330
Ser Gly Thr Gln Gly Asn Asn Ser Thr Lys Lys Gly Pro Glu Gln Ser		335
	340	345
Glu Leu Tyr Ala Gln Leu Ser Lys Ser Ser Val Leu Thr Gly Gly His		350
	355	360
Glu Glu Arg Lys Thr Lys Arg Pro Ser Leu Arg Leu Phe Gly Asp His		365
	370	375
Asp Tyr Cys Gln Ser Ile Asn Ser Lys Thr Glu Ile Leu Ile Asn Ile		380
385	390	395
Ser Gln Glu Leu Gln Asp Ser Arg Gln Leu Glu Asn Lys Asp Val Ser		400
	405	410
Ser Asp Trp Gln Gly Gln Ile Cys Ser Ser Thr Asp Ser Asp Gln Cys		415
	420	425
Tyr Leu Arg Glu Thr Leu Glu Ala Ser Lys Gln Val Ser Pro Cys Ser		430
	435	440
Thr Arg Lys Gln Leu Gln Asp Gln Glu Ile Arg Ala Glu Leu Asn Lys		445
	450	455
His Phe Gly His Pro Ser Gln Ala Val Phe Asp Asp Glu Ala Asp Lys		460
465	470	475
Thr Gly Glu Leu Arg Asp Ser Asp Phe Ser Asn Glu Gln Phe Ser Lys		480
	485	490
Leu Pro Met Phe Ile Asn Ser Gly Leu Ala Met Asp Gly Leu Phe Asp		495
	500	505
Asp Ser Glu Asp Glu Ser Asp Lys Leu Ser Tyr Pro Trp Asp Gly Thr		510
	515	520
Gln Ser Tyr Ser Leu Phe Asn Val Ser Pro Ser Cys Ser Ser Phe Asn		525
	530	535
Ser Pro Cys Arg Asp Ser Val Ser Pro Pro Lys Ser Leu Phe Ser Gln		540

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Ser	Cys	Ser	Arg	Ser	Pro	Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Pro	Gly
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Ser	Arg	Ser	Ser	Ser	Arg	Ser	Cys	Tyr	Tyr	Tyr	Glu	Ser	Ser	His	Tyr
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Arg	His	Arg	Thr	His	Arg	Asn	Ser	Pro	Leu	Tyr	Val	Arg	Ser	Arg	Ser
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Arg	Ser	Pro	Tyr	Ser	Arg	Arg	Pro	Arg	Tyr	Asp	Ser	Tyr	Glu	Glu	Tyr
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Gln	His	Glu	Arg	Leu	Lys	Arg	Glu	Glu	Tyr	Arg	Arg	Glu	Tyr	Glu	Lys
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Arg	Glu	Ser	Glu	Arg	Ala	Lys	Gln	Arg	Glu	Arg	Gln	Arg	Gln	Lys	Ala
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Thr	Arg	Thr	Glu	Leu	Arg	Asp	Arg	Phe	Glu	Val	Phe	Gly	Glu	Ile	Glu
			690			695								700	
Glu	Cys	Thr	Val	Asn	Leu	Arg	Asp	Asp	Gly	Asp	Ser	Tyr	Gly	Phe	Ile
705					710					715					720
Thr	Tyr	Arg	Tyr	Thr	Cys	Asp	Ala	Phe	Ala	Ala	Leu	Glu	Asn	Gly	Tyr
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Thr	Leu	Arg	Arg	Ser	Asn	Glu	Thr	Asp	Phe	Glu	Leu	Tyr	Phe	Cys	Gly
			740					745						750	
Arg	Lys	Gln	Phe	Phe	Lys	Ser	Asn	Tyr	Ala	Asp	Leu	Asp	Ser	Asn	Ser
			755				760							765	
Asp	Asp	Phe	Asp	Pro	Ala	Ser	Thr	Lys	Ser	Lys	Tyr	Asp	Ser	Leu	Asp
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Phe	Asp	Ser	Leu	Leu	Lys	Glu	Ala	Gln	Arg	Ser	Leu	Arg	Arg		
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&lt;210&gt; 1379

&lt;211&gt; 590

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1379

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<210> 1380

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1380

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			20					25					30		
Cys	Pro	Cys	Arg	Val	Ala	Ala	Ser	Pro	Ile	Ser	Ala	Leu	Gly	Val	Pro
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Ala	Leu	Trp	Pro	Arg	His	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys
	50					55					60				
Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys	Gly	Arg
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Val	Xaa	Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa
				85					90					95	
Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Pro
			100					105					110		
Leu	Pro	Ser	Val	Ser	Pro	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro
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<210> 1381

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1381

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<210> 1382

<211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1382  
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 20 25 30  
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 35 40 45  
 Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser  
 50 55 60  
 Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg  
 65 70 75 80  
 Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg  
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 Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly  
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 Leu Ala Pro Ala Lys Gly Leu Phe Gly Asp Leu  
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<210> 1383  
 <211> 906  
 <212> DNA  
 <213> Homo sapiens

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<210> 1384  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 1384  
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 35 40 45  
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His  
 50 55 60  
 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg  
 65 70 75 80  
 Pro Ser Gln Thr Gln Ser Cys Gly Pro Arg Val Ser Arg Arg Ala Asp  
 85 90 95  
 Asn

<210> 1385  
 <211> 210  
 <212> DNA  
 <213> Homo sapiens

<400> 1385  
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 gtggcgtgta tgcattggtgt gtgcacgtgt gcactgtgtg tgggggtgtat gncatggtgg  
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<210> 1386  
 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 1386  
 Thr Arg Ala Leu Gly Val Cys Met Val Thr Tyr Thr Cys Ala Leu Cys  
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 Val Val Cys Met Xaa Trp Cys Val His Val Cys Xaa Cys Val Cys Met  
 20 25 30  
 Val Met Cys Thr Cys Ala Leu Cys Val Ala Cys Met His Gly Val Cys

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      35              40              45
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<210> 1387  
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 <212> DNA  
 <213> Homo sapiens

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<210> 1388  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1388  
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 20 25 30  
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 35 40 45  
 Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu  
 50 55 60  
 Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe  
 65 70 75 80  
 Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly  
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 Ala Ala Phe Ser Gly His Pro  
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<210> 1389  
 <211> 4013

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1389

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cagactctgg gctgtcagc catgtgcacc tgccccccag ctttactga cagccgctgc  
2700  
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2760  
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2820  
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2940  
cagtaccgcc ctcgggggccc ggtcattgac ttctgaaca accagctgct ggccgcgggtg  
3000  
gtggaggcgt tcttatacca cgttccacgg aggagtgagg agcccaggaa cgacgtggtc  
3060  
ttccagccca tctccgggga agacgtgcgc gatgtgacag ccctgaacgt gagcacgctg  
3120

aaggcttact tcagatgcga tggctacaag ggctacgacc tggctctacag cccccagagc  
 3180  
 ggcttcacct gcgtgtcccc gtgcagtagg ggctactgtg accatggagg ccagtgccag  
 3240  
 cacctgccca gtgggccccg ctgcagctgt gtgtccttct ccatctacac ggctggggc  
 3300  
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 3480  
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 3540  
 ttttgggaga ctggaaaagg gaaggtgact gaaggctgtc aggattcttc aaggagaatg  
 3600  
 aatactggga atcaagacaa gactatacct tatccatagg cgcaggtgca cagggggagg  
 3660  
 ccataaagat caaacatgca tggatgggtc ctcacgcaga cacaccaca gaaggacact  
 3720  
 agcctgtgca cgcgcgctg cacacacaca cacacacaca cgagttcata atgtgggtgat  
 3780  
 ggccctaagt taagcaaaat gcttctgcac aaaaaactct ctggtttact tcaaattaac  
 3840  
 tctatttaaa taaagtctct ctgacttttt gtgtctccaa aaccaggaat tccattcctg  
 3900  
 attttcttct ggtggccgaa gggctggaca cagacttctc ccaaccatca gagggcacag  
 3960  
 agtgtggagg ttaagtgctg ggcagcagtg gagcattagg ggcagctgga tcc  
 4013

&lt;210&gt; 1390

&lt;211&gt; 1156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1390

Pro	Leu	Lys	Met	Glu	Thr	Ser	Gly	Met	Thr	Thr	Pro	Ser	Leu	Lys	Thr
1				5					10					15	
Asp	Gly	Gly	Arg	Arg	Thr	Ala	Thr	Ser	Pro	Pro	Pro	Thr	Thr	Ser	Gln
			20					25					30		
Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
		35					40				45				
Ala	Ala	Pro	Ile	Pro	Ile	Leu	Pro	Glu	Arg	Gly	Val	Ser	Leu	Phe	Pro
	50					55					60				
Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
65					70					75				80	
Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
			85					90						95	
Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
			100					105					110		
Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
		115				120						125			
Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

130	135	140
Asp Ala Asp Phe Ser Thr Gly Arg Gly Thr Thr Phe Tyr Gln Glu Tyr		
145	150	155
Glu Thr Phe Tyr Gly Glu His Ser Leu Leu Val Gln Gln Ala Glu Ser		160
	165	170
Trp Ile Arg Lys Ile Thr Asn Asn Gly Gly Tyr Lys Ala Arg Trp Ala		175
	180	185
Leu Lys Val Thr Trp Val Asn Ala His Ala Tyr Pro Ala Gln Trp Thr		190
	195	200
Leu Gly Ser Asn Thr Tyr Gln Ala Ile Leu Ser Thr Asp Gly Ser Arg		205
	210	215
Ser Tyr Ala Leu Phe Leu Tyr Gln Ser Gly Gly Met Gln Trp Asp Val		220
225	230	235
Ala Gln Arg Ser Gly Asn Pro Val Leu Met Gly Phe Ser Ser Gly Asp		240
	245	250
Gly Tyr Phe Glu Asn Ser Pro Leu Met Ser Gln Pro Val Trp Glu Arg		255
	260	265
Tyr Arg Pro Asp Arg Phe Leu Asn Ser Asn Ser Gly Leu Gln Gly Leu		270
	275	280
Gln Phe Tyr Arg Leu His Arg Glu Glu Arg Pro Asn Tyr Arg Leu Glu		285
	290	295
Cys Leu Gln Trp Leu Lys Ser Gln Pro Arg Trp Pro Ser Trp Gly Trp		300
305	310	315
Asn Gln Val Ser Cys Pro Cys Ser Trp Gln Gln Gly Arg Arg Asp Leu		320
	325	330
Arg Phe Gln Pro Val Ser Ile Gly Arg Trp Gly Leu Gly Ser Arg Gln		335
	340	345
Leu Cys Ser Phe Thr Ser Trp Arg Gly Gly Val Cys Cys Ser Tyr Gly		350
	355	360
Pro Trp Gly Glu Phe Arg Glu Gly Trp His Val Gln Arg Pro Trp Gln		365
	370	375
Leu Ala Gln Glu Leu Glu Pro Gln Ser Trp Cys Cys Arg Trp Asn Asp		380
385	390	395
Lys Pro Tyr Leu Cys Ala Leu Tyr Gln Gln Arg Arg Pro His Val Gly		400
	405	410
Cys Ala Thr Tyr Arg Pro Pro Gln Pro Ala Trp Met Phe Gly Asp Pro		415
	420	425
His Ile Thr Thr Leu Asp Gly Val Ser Tyr Thr Phe Asn Gly Leu Gly		430
	435	440
Asp Phe Leu Leu Val Gly Ala Gln Asp Gly Asn Ser Ser Phe Leu Leu		445
	450	455
Gln Gly Arg Thr Ala Gln Thr Gly Ser Ala Gln Ala Thr Asn Phe Ile		460
465	470	475
Ala Phe Ala Ala Gln Tyr Arg Ser Ser Ser Leu Gly Pro Val Thr Val		480
	485	490
Gln Trp Leu Leu Glu Pro His Asp Ala Ile Arg Val Leu Leu Asp Asn		495
	500	505
Gln Thr Val Thr Phe Gln Pro Asp His Glu Asp Gly Gly Gln Glu		510
	515	520
Thr Phe Asn Ala Thr Gly Val Leu Leu Ser Arg Asn Gly Ser Glu Val		525
	530	535
Ser Ala Ser Phe Asp Gly Trp Ala Thr Val Ser Val Ile Ala Leu Ser		540
545	550	555
Asn Ile Leu His Ala Ser Ala Ser Leu Pro Pro Glu Tyr Gln Asn Arg		560

1185

```

          995              1000              1005
Pro Arg Arg Ser Glu Glu Pro Arg Asn Asp Val Val Phe Gln Pro Ile
 1010              1015              1020
Ser Gly Glu Asp Val Arg Asp Val Thr Ala Leu Asn Val Ser Thr Leu
1025              1030              1035              1040
Lys Ala Tyr Phe Arg Cys Asp Gly Tyr Lys Gly Tyr Asp Leu Val Tyr
          1045              1050              1055
Ser Pro Gln Ser Gly Phe Thr Cys Val Ser Pro Cys Ser Arg Gly Tyr
          1060              1065              1070
Cys Asp His Gly Gly Gln Cys Gln His Leu Pro Ser Gly Pro Arg Cys
          1075              1080              1085
Ser Cys Val Ser Phe Ser Ile Tyr Thr Ala Trp Gly Glu His Cys Glu
          1090              1095              1100
His Leu Ser Met Lys Leu Asp Ala Phe Phe Gly Ile Phe Phe Gly Ala
1105              1110              1115              1120
Leu Gly Gly Leu Leu Leu Leu Gly Val Gly Thr Phe Val Val Leu Arg
          1125              1130              1135
Phe Trp Gly Cys Ser Gly Ala Arg Phe Ser Tyr Phe Leu Asn Ser Ala
          1140              1145              1150
Glu Ala Leu Pro
          1155

```

```

<210> 1391
<211> 481
<212> DNA
<213> Homo sapiens

```

```

<400> 1391
gtcgcacggca tcgaggtcca tgacaaggca accgacctca accgcctgcg ccagaagatc
60
ggcattgtgt tccagcagtg gaacgccttc ccgcacctca ccgtgctgga aaacgtgatg
120
ctggcgccgc gcaaggtgct cggtaaaagc aagcagaagg ccgaggagct ggcggtccgg
180
caactgaccc acgtgggcct gagcgacaag ctcaagacct ttcccgcan a gctttccggc
240
ggccagcaac agcgcatggc gattgcccgg gccctggcca tgtcgccgga ctacatgctg
300
ttcgacgaag ccacctcggc ccttgatccg cagttggtgg gcgaggtgct ggacaccatg
360
cgcatgctcg ccgaagacgg catgaccatg gtcttggtga cccatgaaat ccgctttgcc
420
cgcgatgtgt ccgatcgctt ggcgttcttt cgcaacggcc tgggtgcacga gatcggcgcg
480
c
481

```

```

<210> 1392
<211> 160
<212> PRT
<213> Homo sapiens

```

```

<400> 1392
Val Asp Gly Ile Glu Val His Asp Lys Ala Thr Asp Leu Asn Arg Leu

```



```

      1           5           10           15
Arg  Gln  Lys  Ile  Gly  Ile  Val  Phe  Gln  Gln  Trp  Asn  Ala  Phe  Pro  His
      20           25           30
Leu  Thr  Val  Leu  Glu  Asn  Val  Met  Leu  Ala  Pro  Arg  Lys  Val  Leu  Gly
      35           40           45
Lys  Ser  Lys  Gln  Lys  Ala  Glu  Glu  Leu  Ala  Val  Arg  Gln  Leu  Thr  His
      50           55           60
Val  Gly  Leu  Ser  Asp  Lys  Leu  Lys  Thr  Phe  Pro  Ala  Xaa  Leu  Ser  Gly
      65           70           75           80
Gly  Gln  Gln  Gln  Arg  Met  Ala  Ile  Ala  Arg  Ala  Leu  Ala  Met  Ser  Pro
      85           90           95
Asp  Tyr  Met  Leu  Phe  Asp  Glu  Ala  Thr  Ser  Ala  Leu  Asp  Pro  Gln  Leu
      100          105          110
Val  Gly  Glu  Val  Leu  Asp  Thr  Met  Arg  Met  Leu  Ala  Glu  Asp  Gly  Met
      115          120          125
Thr  Met  Val  Leu  Val  Thr  His  Glu  Ile  Arg  Phe  Ala  Arg  Asp  Val  Ser
      130          135          140
Asp  Arg  Val  Ala  Phe  Phe  Arg  Asn  Gly  Leu  Val  His  Glu  Ile  Gly  Ala
      145          150          155          160

```

&lt;210&gt; 1393

&lt;211&gt; 309

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1393

```

cggccgccat cggcgcgggc cttgtgggat atggccatta ctgaggtgct ggccggctac
60
tacgaacccg acgaacacgg acaccgcaag cccgagtcgt tgtacggcgc ggtcaagatg
120
tgggcccttc tgcgccgtca gggcatcagg tggcccgtg cancggtgga gcgcctcatg
180
cgggacaacc ggtggcggtg ggtgacccgc cgtaagaagg ttncgcacca ccacgctga
240
cccggctgcc gggcgagccc cggatctggt ggaccgccag ttccgcgtcg aggcgcccac
300
caagttgct
309

```

&lt;210&gt; 1394

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1394

```

Arg  Pro  Pro  Ser  Ala  Arg  Ala  Leu  Trp  Asp  Met  Ala  Ile  Thr  Glu  Val
      1           5           10           15
Leu  Ala  Gly  Tyr  Tyr  Glu  Pro  Asp  Glu  His  Gly  His  Arg  Lys  Pro  Glu
      20           25           30
Ser  Leu  Tyr  Gly  Ala  Val  Lys  Met  Trp  Ala  Leu  Leu  Arg  Arg  Gln  Gly
      35           40           45
Ile  Arg  Trp  Pro  Ala  Ala  Xaa  Val  Glu  Arg  Leu  Met  Arg  Asp  Asn  Arg
      50           55           60
Trp  Arg  Gly  Val  Thr  Arg  Arg  Lys  Lys  Val  Xaa  His  His  His  Arg

```

65

70

75

&lt;210&gt; 1395

&lt;211&gt; 347

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1395

```

accggtgggg ttcgtggtgg cctggttact ttttggcgcg agcgggtgtg tgtggggccgt
60
tatgacggta gtcgtgggcg aaacggtgct tgctgttggt cgccgtcaac gtcgaagagc
120
ccagattctt aaaggcggtc gcgatgttgc ccgggcgaca agggccttgg ctggacgggt
180
gtcgggtgggg gagatccccct cagttgcact agagcacgtg gccgatgacg tggaggtatt
240
ggctcaggct aggcggggctc atgcagtggg cggaagcgtt tccgacgccc tcattgccac
300
ctcccgcaa ccagggatgg ctggtctggt gccactagcc cacgcgt
347

```

&lt;210&gt; 1396

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1396

```

Met Thr Val Val Gly Glu Thr Val Leu Val Val Val Arg Arg Gln
1      5      10      15
Arg Arg Arg Ala Gln Ile Leu Lys Gly Gly Arg Asp Val Ala Arg Ala
20     25     30
Thr Arg Ala Leu Ala Gly Arg Val Ser Val Gly Glu Ile Pro Ser Val
35     40     45
Ala Leu Glu His Val Ala Asp Asp Val Glu Val Leu Ala Gln Ala Arg
50     55     60
Arg Ala His Ala Val Gly Gly Ser Val Ser Asp Ala Leu Ile Ala Thr
65     70     75     80
Ser Arg Gln Pro Gly Met Ala Gly Leu Val Pro Leu Ala His Ala
85     90     95

```

&lt;210&gt; 1397

&lt;211&gt; 308

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1397

```

caattgcgcg gggttactgca ggcgaagatg cagatgatgt cggacaccaa tttcctcgac
60
ctggccccgcg tcgcgattgc cgccactatc cattctccgg aacgcgcgca agacatggtc
120
aacgcgttga gcaaacgcga agaaggcttc acgcaatggg tacgtgccgc acaggacgat
180
ggtcgactgt cctgcagcga ccgggcgttc gctgcccacc agatacaaag cctgctcaag
240

```

gcgttcgcct tttggccgca aatcacccctg ggccagccgg tgctggatgc cgccagccag  
 300  
 gccaacgt  
 308

<210> 1398  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1398  
 Met Gln Met Met Ser Asp Thr Asn Phe Leu Asp Leu Ala Arg Val Ala  
 1 5 10 15  
 Ile Ala Ala Thr Ile His Ser Pro Glu Arg Ala Gln Asp Met Val Asn  
 20 25 30  
 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala  
 35 40 45  
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His  
 50 55 60  
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr  
 65 70 75 80  
 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn  
 85 90

<210> 1399  
 <211> 539  
 <212> DNA  
 <213> Homo sapiens

<400> 1399  
 gctagctaac atttattttt gtttttatta ttgttatcta gtggtaaaaa tttcttaagc  
 60  
 aatgaactga agtctagatt tttgagatgt agtcctttac tgattataaa gcaaatgcct  
 120  
 ttagatatatt taacttcattc agtactatct gtagtaggag gctgatttta ctaaaattag  
 180  
 ataattatat acatctgttc ctattccttt ggtaggacct ttaagaaagt catgctgaat  
 240  
 ctgagaatgc caggacattt cacgtggtat gaatgtagga tattcattta cacatcgctg  
 300  
 cacagacagc ctctatataa cccaccctgt tgggggtattg aattttttct tttcccgccc  
 360  
 tactttttaa tcttgtcatg taatttcaac acataatttg tggcacttta gtttttttac  
 420  
 cttttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaaatggg  
 480  
 aacaaagaaa attgcttcac catctgtgaa cccctccttt tgtagtcccc ttcacgcgt  
 539

<210> 1400  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1400

```

Met Asn Val Gly Tyr Ser Phe Thr His Arg Cys Thr Asp Ser Leu Tyr
 1           5           10           15
Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Phe Ser Arg Pro Thr
           20           25           30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
           35           40           45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
           50           55           60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65           70           75           80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
           85           90

```

&lt;210&gt; 1401

&lt;211&gt; 653

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1401

```

ttcgaggggt cacttggaact caagcttcgc gaagtccggg acctcggacg accgattttt
60
cggtgtgtgca ccgtcaccgc aaggctggcg tgggttnnct catcaccggc gcggcgatgg
120
ncattgggggt ttgatggccg cgtttcctctg ctgctggggcg cgatcctcat cgtcaccggc
180
ccaacgggtga ttaacccgat cctgcgtcag ttgcgtccta cccggcgagt gagtgtctctg
240
ttgaggtggg aaggaatcgt cgtcgatccg ctcggcgcca tcctggcatt actggtgtat
300
caggccataa ccagcatcga ccgatcttcc atcggacaag gcgtcttgaa tctggggctc
360
accctattgg tcgggctgct cttcgttggc cccatcgggt ggatcgtcac cgcatgatg
420
aaacggcacc tcatcccga cttcctacaa ggcgatgatt tcgttgggggt cgccgttgga
480
acgtgtgttg gcgctaacgt cattcggggag gaatcgggcc tggtcgccgt tacgatgctc
540
ggcatctacc tggcgaacca gcgcaacctc gagcttgagc ccgtcatcga gttcaaggaa
600
cacctgcagg tgctcctcgt tggcgctccta ttcatcatgc ttgcaggacg cgt
653

```

&lt;210&gt; 1402

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1402

```

Phe Glu Gly Ser Leu Gly Leu Lys Leu Arg Glu Val Arg Asp Leu Gly
 1           5           10           15
Arg Pro Ile Phe Arg Leu Cys Thr Val Thr Ala Arg Leu Ala Trp Val
           20           25           30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

```

```
<210> 1403
<211> 393
<212> DNA
<213> Homo sapiens
```

```
<210> 1404
<211> 127
<212> PRT
<213> Homo sapiens
```

1191

	20		25		30
Asn Gly	Asn Arg Glu Ala Leu Thr	Ala Leu Arg Lys Gln Ala Arg Thr			
35	40	45			
Ser Lys Thr Ser Val Pro Ser Pro Phe Glu Val Ile Met Lys Glu Met					
50	55	60			
Glu Gly Ser Ser Gly Lys Gln Leu Ile Lys Glu Ile Cys Pro Thr Cys					
65	70	75			80
Gly Asp His Asp Pro Lys Glu His Thr Trp Leu Met Phe Pro Gly Ser					
85	90	95			
Asp Met Phe Ala Arg Val Pro Phe His Val Ala His Thr Val Val Glu					
100	105	110			
Lys Asp Gln Glu Arg Leu Asp Leu Asp Thr Lys Lys Leu Gln Ser					
115	120	125			

<210> 1405  
 <211> 421  
 <212> DNA  
 <213> Homo sapiens

<400> 1405  
 nncgactgc acaaggccct gggcatcgaa ctgcccggcg cactgcaggt catcgtcaaa  
 60  
 ggcgaaacca gcctgcaatg gctcggccccg gacgaatggc tgctgatcgt gcccagcggg  
 120  
 gaagagttcg ccgccgagca aaacctgcgt gccgccctgg gcgagttgca tatccaggtc  
 180  
 gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gcccgaaact gcgcgacgtg  
 240  
 ctgatgaaat ccaccagcta cgacgtacac cccaacaact tcccgggtggg caaggcgggtg  
 300  
 ggcacgggtgt tcgccaagtc gcaactgggtg atccgccata ccgccgaaga cacctgggaa  
 360  
 ctgctgatcc gtcgcagctt ctccgattac tgggtggctgt gggtgcagga cgcggtctga  
 420  
 t  
 421

<210> 1406  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<400> 1406  
 Xaa Arg Leu His Lys Ala Leu Gly Ile Glu Leu Pro Gly Ala Leu Gln  
 1 5 10 15  
 Val Ile Val Lys Gly Glu Thr Ser Leu Gln Trp Leu Gly Pro Asp Glu  
 20 25 30  
 Trp Leu Leu Ile Val Pro Ser Gly Glu Glu Phe Ala Ala Glu Gln Asn  
 35 40 45  
 Leu Arg Ala Ala Leu Gly Glu Leu His Ile Gln Val Val Asn Val Ser  
 50 55 60  
 Gly Gly Gln Gln Ile Leu Glu Leu Ser Gly Pro Asn Val Arg Asp Val  
 65 70 75 80  
 Leu Met Lys Ser Thr Ser Tyr Asp Val His Pro Asn Asn Phe Pro Val

```
<210> 1408
<211> 335
<212> PRT
<213> Homo sapiens
```

```

<400> 1408
Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1           5           10           15
Val Leu Glu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
      20           25           30
Asp Ser Ala Asn Ala Lys Thr Leu Glu Ala Ala Ser Lys Phe Gln
      35           40           45
Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
      50           55           60
Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
      65           70           75           80
Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
      85           90           95
Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
      100          105          110
Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
      115          120          125
Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
      130          135          140
Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
      145          150          155          160
Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
      165          170          175
Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
      180          185          190
His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
      195          200          205
Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
      210          215          220
Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
      225          230          235          240
Trp Asn Pro Gln Asn Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
      245          250          255
Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
      260          265          270
Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
      275          280          285
Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
      290          295          300
Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
      305          310          315          320
Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
      325          330          335

```

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

```

nnnatgaagt tcttggtttt ttcagaaaaa cgcgcttttt gctatgctgg ccgccccgcg
60
gcacgagata gcaccatgca actgatcgat atcggcgctca acctgaccaa cagcagtttc
120

```



cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg ccggcggttac gcaaattgctg  
 180  
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgccca tcaactggat  
 240  
 gcaagcggcg cccacctgtt cgccacggcc ggcgtgcac  
 279

<210> 1410  
 <211> 93  
 <212> PRT  
 <213> Homo sapiens

<400> 1410  
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala  
 1 5 10 15  
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly  
 20 25 30  
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val  
 35 40 45  
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr  
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 <213> Homo sapiens

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<210> 1412  
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 <212> PRT  
 <213> Homo sapiens

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      20      25      30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
      35      40      45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
      50      55      60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
      65      70      75      80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
      85      90      95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
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&lt;210&gt; 1413

&lt;211&gt; 385

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1413

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385

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&lt;210&gt; 1414

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1414

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Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
1      5      10      15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
      20      25      30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
      35      40      45
Val Ile Asn Arg Val Leu Ser
      50      55

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&lt;210&gt; 1415

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1415

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 300  
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<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

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Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
			20					25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
	50					55					60				
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65					70					75				80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
				85					90					95	
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
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Phe	Glu	Val	Leu	Arg	Val	Arg	Thr	Ser	Phe	Pro					
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<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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360  
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420  
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&lt;210&gt; 1418

<211> 1532  
 <212> PRT  
 <213> Homo sapiens

<400> 1418

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			20					25					30		
Thr	Leu	Ile	Thr	Gly	Ser	Lys	Thr	Pro	Ala	Pro	Val	Thr	Ser	Thr	Gly
		35				40						45			
Ser	Thr	Thr	Ala	Thr	Leu	Glu	Gly	Gln	Ser	Thr	Ala	Ala	Ser	Ser	Arg
	50					55					60				
Thr	Ser	Asn	Gln	Asp	Ile	Ser	Ala	Ser	Ser	Gln	Asn	His	Gln	Thr	Lys
65					70					75				80	
Ser	Thr	Glu	Thr	Thr	Ser	Lys	Ala	Gln	Thr	Asp	Thr	Leu	Thr	Gln	Met
				85					90					95	
Met	Thr	Ser	Thr	Leu	Phe	Ser	Ser	Pro	Ser	Val	His	Asn	Val	Met	Glu
			100					105					110		
Thr	Val	Thr	Gln	Glu	Thr	Ala	Pro	Pro	Asp	Glu	Met	Thr	Thr	Ser	Phe
		115					120						125		
Pro	Ser	Ser	Val	Thr	Asn	Thr	Leu	Met	Met	Thr	Ser	Lys	Thr	Ile	Thr
	130					135						140			
Met	Thr	Thr	Ser	Thr	Asp	Ser	Thr	Leu	Gly	Asn	Thr	Glu	Glu	Thr	Ser
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Thr	Ala	Gly	Thr	Glu	Ser	Ser	Thr	Pro	Val	Thr	Ser	Ala	Val	Ser	Ile
				165					170					175	
Thr	Ala	Gly	Gln	Glu	Gly	Gln	Ser	Arg	Lys	Thr	Ser	Trp	Arg	Thr	Ser
			180					185					190		
Ile	Gln	Asp	Thr	Ser	Ala	Ser	Ser	Gln	Asn	His	Trp	Thr	Arg	Ser	Thr
		195					200						205		
Gln	Thr	Thr	Arg	Glu	Ser	Gln	Thr	Ser	Thr	Leu	Thr	His	Arg	Thr	Thr
	210					215					220				
Ser	Thr	Pro	Ser	Phe	Ser	Pro	Ser	Val	His	Asn	Val	Thr	Gly	Thr	Val
225					230					235				240	
Ser	Gln	Lys	Thr	Ser	Pro	Ser	Gly	Glu	Thr	Ala	Thr	Ser	Ser	Leu	Cys
				245					250					255	
Ser	Val	Thr	Asn	Thr	Ser	Met	Met	Thr	Ser	Glu	Lys	Ile	Thr	Val	Thr
			260					265						270	
Thr	Ser	Thr	Gly	Ser	Thr	Leu	Gly	Asn	Pro	Gly	Glu	Thr	Ser	Ser	Val
		275					280					285			
Pro	Val	Thr	Gly	Ser	Leu	Met	Pro	Val	Thr	Ser	Ala	Ala	Leu	Val	Thr
	290					295					300				
Val	Asp	Pro	Glu	Gly	Gln	Ser	Pro	Ala	Thr	Phe	Ser	Arg	Thr	Ser	Thr
305					310					315				320	
Gln	Asp	Thr	Thr	Ala	Phe	Ser	Lys	Asn	His	Gln	Thr	Gln	Ser	Val	Glu
				325					330					335	
Thr	Thr	Arg	Val	Ser	Gln	Ile	Asn	Thr	Leu	Asn	Thr	Leu	Thr	Pro	Val
			340					345					350		
Thr	Thr	Ser	Thr	Val	Leu	Ser	Ser	Pro	Ser	Gly	Phe	Asn	Pro	Ser	Gly
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Thr	Val	Ser	Gln	Glu	Thr	Phe	Pro	Ser	Gly	Glu	Thr	Thr	Ile	Ser	Ser
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Pro	Ser	Ser	Val	Ser	Asn	Thr	Phe	Leu	Val	Thr	Ser	Lys	Val	Phe	Arg

385                      390                      395                      400  
 Met Pro Ile Ser Arg Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser  
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 Leu Ser Val Ser Gly Thr Ile Ser Ala Ile Thr Ser Lys Val Ser Thr  
                          420                      425                      430  
 Ile Trp Trp Ser Asp Thr Leu Ser Thr Ala Leu Ser Pro Ser Ser Leu  
                          435                      440                      445  
 Pro Pro Lys Ile Ser Thr Ala Phe His Thr Gln Gln Ser Glu Gly Ala  
                          450                      455                      460  
 Glu Thr Thr Gly Arg Pro His Glu Arg Ser Ser Phe Ser Pro Gly Val  
 465                      470                      475                      480  
 Ser Gln Glu Ile Phe Thr Leu His Glu Thr Thr Thr Trp Pro Ser Ser  
                          485                      490                      495  
 Phe Ser Ser Lys Gly His Thr Thr Trp Ser Gln Thr Glu Leu Pro Ser  
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 Thr Ser Thr Gly Ala Ala Thr Arg Leu Val Thr Gly Asn Pro Ser Thr  
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 Gly Ala Ala Gly Thr Ile Pro Arg Val Pro Ser Lys Val Ser Ala Ile  
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 Thr Arg Ser Val Ser Pro Met Thr Asp Thr Lys Thr Val Thr Thr Pro  
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 Gly Ser Ser Phe Thr Ala Ser Gly His Ser Pro Ser Glu Ile Val Pro  
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 Gln Asp Ala Pro Thr Ile Ser Ala Ala Thr Thr Phe Ala Pro Ala Pro  
                          690                      695                      700  
 Thr Gly Asp Gly His Thr Thr Gln Ala Pro Thr Thr Ala Leu Gln Ala  
 705                      710                      715                      720  
 Thr Pro Ser Ser His Asp Ala Thr Leu Gly Pro Ser Gly Gly Thr Ser  
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 Leu Ser Lys Thr Gly Ala Leu Thr Leu Ala Asn Ser Val Val Ser Thr  
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 Pro Gly Gly Pro Glu Gly Gln Trp Thr Ser Ala Ser Ala Ser Thr Ser  
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 Pro Asp Thr Ala Ala Ala Met Thr His Thr His Gln Ala Glu Ser Thr  
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 Glu Ala Ser Gly Gln Thr Gln Thr Ser Glu Pro Ala Ser Ser Gly Ser  
 785                      790                      795                      800  
 Arg Thr Thr Ser Ala Gly Thr Ala Thr Pro Ser Ser Ser Gly Ala Ser  
                          805                      810                      815  
 Gly Thr Thr Pro Ser Gly Ser Glu Gly Ile Ser Thr Ser Gly Glu Thr



1203

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Gly His Ala Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr		
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Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1280
	1285	1290
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1295
	1300	1305
Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr		1310
	1315	1320
Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1325
	1330	1335
Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr		1340
1345	1350	1355
Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr		1360
	1365	1370
Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1375
	1380	1385
Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1390
	1395	1400
Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr		1405
	1410	1415
Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1420
1425	1430	1435
Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr		1440
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Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr		1455
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Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr		1485
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	1525	1530

<210> 1419  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 1419  
 aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct  
 60  
 gaggttcct tgatggaaat caagtattgt actggtaaatt ttattcagga cagtgggtctg  
 120  
 gattatatca tcatccgttt gtgtgggttc atgcaggggc ttattgggca atatgctgtt  
 180  
 cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg  
 240  
 gatacccagg acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag  
 300  
 aaactcatg  
 309

<210> 1420  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1420  
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys  
 1 5 10 15  
 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly  
 20 25 30  
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys  
 35 40 45  
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu  
 50 55 60  
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met  
 65 70 75 80  
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu  
 85 90 95  
 Lys Ala Asn Lys Lys Leu Met  
 100

<210> 1421  
 <211> 385  
 <212> DNA  
 <213> Homo sapiens

<400> 1421  
 ccatggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca  
 60  
 ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag  
 120  
 gatgttagag caaagccgag cccagctgct ggcgaatgca tctgtgatgc ccatgagcag  
 180  
 ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagtg  
 240  
 ccctcagagc cctgattttt cacaaaccga ctctccaag cctccctgt gggcgggata  
 300  
 cacaagccag agtcgccttg tcacatctct tctctctcca ccaggtcatg ggcaaacctt  
 360  
 cctgacatac tttacgacat tacag  
 385

<210> 1422  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1422  
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg  
 1 5 10 15  
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu  
 20 25 30  
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

      35              40              45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
  50              55              60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
  65              70              75              80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
      85              90              95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
      100              105              110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
      115              120              125

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<210> 1423  
 <211> 336  
 <212> DNA  
 <213> Homo sapiens

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<400> 1423
nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
  60
ctctatatttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
  120
tgtgtcacc c tgattgatct ggagcttcac aatcctaaag caatagcagt agatccaata
  180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
  240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
  300
ctagacctag tcaacaaaatt ggtttactgg gtagat
  336

```

<210> 1424  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

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<400> 1424
Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
  1              5              10              15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
      20              25              30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
      35              40              45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
      50              55              60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
  65              70              75              80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
      85              90              95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
      100              105              110

```

<210> 1425  
 <211> 672

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1425

```

accggtgttt tcgatcacct ggcggggttg agtgactatc gcagtcagat cggcccgatg
60
gcccggcatg tcgaagacct ggccttggcg ctacagggtca ttgccggtga agatggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaagggggtg
180
cgagtcgcct ggtacagcga tggtagcatt gagcccgttg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgctt tgatccgccc ggccttcccc
300
tcggcggttg gcaatgcccg tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgcatg cgatccagct gttttcagat tgggacagc tccgtacagc catgctgggg
420
ttcatggccg actacgacat taccctgtgc cctgtcgatg ccgcgccggc gacccaactg
480
ggagagacgc ggccagggtt gttcagttcc ccccttccca atggcttggc gggttggcct
540
tgtgtggttg tccgggccgg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgcgcggttg gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

```

&lt;210&gt; 1426

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1426

```

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
1      5      10      15
Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Leu Gln
20     25     30
Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
35     40     45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
50     55     60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
65     70     75     80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
85     90     95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
100    105    110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
115    120    125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
130    135    140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

145		150		155		160									
Gly	Glu	Thr	Arg	Pro	Gly	Leu	Phe	Ser	Ser	Pro	Leu	Pro	Asn	Gly	Leu
				165					170					175	
Ala	Gly	Trp	Pro	Cys	Val	Val	Val	Arg	Ala	Gly	Thr	Asp	Ser	Ala	Gly
			180					185					190		
Leu	Pro	Val	Gly	Val	Gln	Ile	Val	Ala	Arg	Pro	Trp	His	Glu	Pro	Val
		195					200					205			
Ala	Leu	Ala	Ala	Ala	Ala	Ala	Ile	Glu	Arg	Ala	Leu	Pro	Phe	Thr	Arg
	210					215					220				

<210> 1427  
 <211> 270  
 <212> DNA  
 <213> Homo sapiens

<400> 1427  
 atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc  
 60  
 tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa  
 120  
 ttgatgcaag tccatccctc aggggctgta cgcttccgtc actgttcagt tccccagaat  
 180  
 aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt  
 240  
 gcaggagaga atgacgaaag cttggctagc  
 270

<210> 1428  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 1428
Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
1 5 10 15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
20 25 30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
35 40 45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
50 55 60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65 70 75 80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
85 90

<210> 1429  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 1429  
 ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga  
 60

catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg  
 120  
 gcggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgccgttg  
 180  
 atcgccctcg acatgggctg cgcagtgtcg acggtcaacc tgggtggcagg cgcggccttg  
 240  
 ctgggggttg ccaccgggtt ggcgttttta ttgcccatgg gcgaccgctt tgaccggcgc  
 300  
 aagctggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg  
 360  
 ccgaggatct gggcgttgat cggc  
 384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met	Thr	Ser	Glu	Asn	Ala	Pro	Pro	Arg	Gly	Lys	Ile	Ile	Met	Met	Ala
1				5					10					15	
Val	Ile	Ala	Gly	Ala	Val	Val	Thr	Asn	Ile	Tyr	Cys	Thr	Gln	Pro	Val
		20						25					30		
Leu	Pro	Leu	Ile	Ala	Ser	Asp	Met	Gly	Val	Ala	Val	Ser	Thr	Val	Asn
		35					40					45			
Leu	Val	Ala	Gly	Ala	Ala	Leu	Leu	Gly	Phe	Ala	Thr	Gly	Leu	Ala	Phe
	50					55					60				
Leu	Leu	Pro	Met	Gly	Asp	Arg	Phe	Asp	Arg	Arg	Lys	Leu	Val	Leu	Gly
65				70					75					80	
Gln	Ile	Ala	Leu	Ala	Phe	Cys	Phe	Ala	Leu	Ala	Ala	Ala	Phe	Ala	Pro
				85					90					95	
Arg	Ile	Trp	Ala	Leu	Ile	Gly									
				100											

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

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 60  
 aaactggcga cacctgtgac tttgcctttc ccagggtccc tgctctccgc tccaggtagg  
 120  
 ctcagcctga gggaggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac  
 180  
 tccttcagct tgtcttggga gagctgtggg ctgcatcccc ctggtctctc gtcccacagg  
 240  
 cagccccgct gtgtgtctgg tcttgacagg tggctgcagc ttctgggccc tgcttcacg  
 300  
 ccctcttccc atgacacctc agccttgga ggtgtaatag tttcccatgt tgctgatctt  
 360  
 tagtttgctt ccctctctct ggctgttctt tctgctgttc catcctctgt gcac  
 414

<210> 1432  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1432  
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly  
 1 5 10 15  
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His  
 20 25 30  
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr  
 35 40 45  
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys  
 50 55 60  
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser  
 65 70 75 80  
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe  
 85 90 95  
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala  
 100 105

<210> 1433  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1433  
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 60  
 gacgcggccg tcagcaatgc tgtggccttg aagttccgct gtggtggaca aacgtgcatt  
 120  
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc  
 180  
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg  
 240  
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcatg gcaa  
 294

<210> 1434  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1434  
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp  
 1 5 10 15  
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe  
 20 25 30  
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His  
 35 40 45  
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys  
 50 55 60  
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro



65                                      70                                      75                                      80  
 Leu Val Asn Glu Ala Ser Gln Asp Lys Ala Glu Ser His Val Arg Ala  
                                     85                                      90                                      95  
 Met Gln

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

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ntttctggct tatgtggttt ccccggtgtg gaggtgggat ccactccccg catagtctct
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cgtggcgatg ggacacctgg aaagtgtgtg gatgtctttg aatgtgttaa tgatacaaag
120
ccagcctgcg tattaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgccca gtgtggtgag
240
ataaactgcg agaggtacta cgtgcccga gtagagtgtg gccagtgtg tgaaatccag
300
tgtatccttt taataatccc gctggctgtg gccaatggcc tgatccttgc ccacggagac
360
cgggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
420
gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgcctgggga gtgttgccct
480
gtgtgcgaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgcactctga caggaagga ctgcattaat ggtttcaaac gcgatcacia tggttgtcgg
600
acctgtcagt gcataaacac cgaggaacta tgttcagaac gtaaacaagg ctgcacctg
660
aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgccc
720
aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
780
aataagcacg gctgtgacat ctgtcgtgtg aagaaatgtc cagagctctc atgcagtaag
840
natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
900
ggcctctgct tcagctgggc caccatcct gtcgggcact tgtctcaccg tggatggtca
960
tcatcataaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgccctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactccnct ccatttgcca cgccctgga ggagaatact ttgtggaagg agaaacgtgg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

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gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag  
 1320  
 tgtacagatc aaccttttctg gccttccttg tcccgcataa acagcgtacc taattactgc  
 1380  
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc  
 1440  
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc  
 1500  
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgtccct actgcataga agacacaatt  
 1560  
 ccaaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac  
 1620  
 cttgacagct gcacccactg ctactgcctg cagggccaga ccttctgctc gaccgtcagc  
 1680  
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt  
 1740  
 ccagaaatgt atgtcccagt cccttcacgc gt  
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55					60				
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75				80	
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
				85					90					95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Pro	Leu	Ala	Ala	Ala	Asn	
			100					105					110		
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
		115					120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
	130					135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
				165				170						175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
		180						185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
	195					200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

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225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

```

<210> 1437
<211> 372
<212> DNA
<213> Homo sapiens

```

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<400> 1437
cggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60
aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggcccgtt gactcgtgga
120
cccgtaccct catgacctcg atgcaacttc cacggtggtc caccgatcac atcgaccgct
180
cgggccatgt cgatgctgag cagttcgacc ggttgccgag cgagttcctg tcccgtgggc
240
acagttctgg ccctgccgca catgggggtcc tgggacttgg ccggggccctg ggtggccaga
300
cgcggttctt ccccgagttc cgtcgcggag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

```

<210> 1438
<211> 62
<212> PRT
<213> Homo sapiens

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<400> 1438
Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50          55          60

```

```

<210> 1439
<211> 471
<212> DNA
<213> Homo sapiens

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&lt;400&gt; 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc  
60  
tgcttctttc cacaatgtag acttaaaaaa atcgccgtaa acattttacc atatgattga  
120  
gtcaggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcatg ggtggggagt  
180  
cgcggaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt  
240  
ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc  
300  
agtgggttaa caagacgacg gggaaacttca gagtgcaggc agtcctcatc tttggcagat  
360  
tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag  
420  
cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c  
471

&lt;210&gt; 1440

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
		35					40					45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
	50					55					60				
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65					70				75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
				85				90					95		
Val	Lys	Ile	Leu	Ser											
				100											

&lt;210&gt; 1441

&lt;211&gt; 376

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1441

nnngagtcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg  
60  
gcagctcaca ttcaccacac ggggaactcac tctcaccaca cggcagctca ctctctctgc  
120  
accgcagctc aactcaccg cacggcagct cactctcacc gcacggcagc tcacactcac  
180  
cacacagcag ctactcttta ccggacgggg aacctaaact taccggacgg gaagcctcac  
240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct  
 300  
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctactctca ccacacggca  
 360  
 cctcactctc acgcgt  
 376

<210> 1442  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 1442  
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His  
 1 5 10 15  
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His  
 20 25 30  
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr  
 35 40 45  
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala  
 50 55 60  
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His  
 65 70 75 80  
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His  
 85 90 95  
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr  
 100 105 110  
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala  
 115 120 125

<210> 1443  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

<400> 1443  
 atggcagccc tgcgtcccaa ggagctgcca caactaatgg tcgccatcgg caatgcgagc  
 60  
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg  
 120  
 gaagccgcta cgacttcttg ggctgacatc gactgcgaca agaaaacctg gacgatccca  
 180  
 gcggagcgta tgaaaaagcg acgtgccccat gtcataccgc taaccgagca cgcacttgcc  
 240  
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt  
 286

<210> 1444  
 <211> 95  
 <212> PRT  
 <213> Homo sapiens

<400> 1444  
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

1	5	10	15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln			
	20	25	30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala			
	35	40	45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met			
	50	55	60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala			
65	70	75	80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala			
	85	90	95

<210> 1445  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1445  
 naccggttca ccggggaggc cttcgatggg ggcaagggtca gcatgggttg cccgattccc  
 60  
 atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc cggcaagcag  
 120  
 actccctacc gggagacggg ctccaagcgg accactactt gggtctttcg agccgggtca  
 180  
 gaggtttatg agctggcctt ccccccaggga gtcgtgttcg ccatgcaaag cgcctcgttg  
 240  
 aggggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg  
 294

<210> 1446  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1446
Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
1 5 10 15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
20 25 30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
35 40 45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
50 55 60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
65 70 75 80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
85 90 95
Arg Leu

<210> 1447  
 <211> 363  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1447

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nnncagaacc agaagatcaa cctgcatgac ggctcgttct cgcacgttgg cggcatgggtg
60
ggtaatatct ccattgccc a ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac
120
gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
180
ctctacgggg ctggcgggtgc cgaccagggt tgggttggtt cgggcaacaa taccttcgtg
240
ttcgccgccc tttccgactc ggccgcgaaa gcggccgacc ggatcatgga cttcaccagt
300
ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
360
gcg
363

```

&lt;210&gt; 1448

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1448

```

Xaa Gln Asn Gln Lys Ile Asn Leu His Asp Gly Ser Phe Ser Asp Val
1           5           10           15
Gly Gly Met Val Gly Asn Ile Ser Ile Ala Gln Gly Val Thr Ile Glu
20           25           30
Asn Ala Val Gly Gly Ser Gly Asn Asp Leu Leu Ile Gly Asn Asp Ala
35           40           45
Ala Asn Glu Leu Arg Gly Gly Ala Gly Asn Asp Ile Leu Tyr Gly Ala
50           55           60
Gly Gly Ala Asp Gln Val Trp Val Gly Ser Gly Asn Asn Thr Phe Val
65           70           75           80
Phe Ala Ala Val Ser Asp Ser Ala Pro Lys Ala Ala Asp Arg Ile Met
85           90           95
Asp Phe Thr Ser Gly Gln Asp Lys Ile Asp Leu Ser Gly Ile Thr His
100          105          110
Gly Ser Gly Leu Thr Phe Val Asn Ala
115          120

```

&lt;210&gt; 1449

&lt;211&gt; 541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1449

```

aggcgctacc agattatggg ctgcccgcacc tcaatgacat gcgcttgagc ctgcatgaat
60
cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcgggttg
120
ggaatgtacg tgtcaggagg agggagggtg cctacaaccc tttggtactg gcgtttgtga
180
ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
240

```

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg  
 300  
 aactcagtgc attgcgcacg cttggggcggc gtttttctga acgcaatccc gccctggcac  
 360  
 cctttcttgc cgattccagg ccaggacccg gacgtcgagg gtctattgaa agtctttgcc  
 420  
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgagggt gacccattca  
 480  
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag  
 540  
 t  
 541

<210> 1450  
 <211> 138  
 <212> PRT  
 <213> Homo sapiens

<400> 1450  
 Met Arg Leu Ser Leu His Glu Ser Leu Ser Gln Ser Arg Leu Ala Ile  
 1 5 10 15  
 Glu Arg Phe Ile Gln Ala Tyr Glu Pro Arg Leu Gly Asn Val Arg Val  
 20 25 30  
 Arg Arg Arg Glu Gly Ala Tyr Asn Pro Leu Val Leu Ala Phe Val Ile  
 35 40 45  
 Glu Ala Thr Val Val Ile Asp Gly Val Ile Gln Pro Val Val Phe Asn  
 50 55 60  
 Ala His Leu Val Gly Gly Gly Thr Gly Arg Val Cys Tyr Leu Met Phe  
 65 70 75 80  
 Phe Glu Leu Phe Tyr Gln Ser Glu Leu Ser Ala Leu Arg Thr Leu Gly  
 85 90 95  
 Arg Arg Phe Ser Glu Arg Asn Pro Ala Leu Ala Pro Phe Leu Ala Asp  
 100 105 110  
 Ser Arg Pro Gly Pro Gly Arg Arg Gly Ser Ile Glu Ser Leu Cys Leu  
 115 120 125  
 Ser Pro Arg Ala Pro Ala Pro Glu Ala Cys  
 130 135

<210> 1451  
 <211> 326  
 <212> DNA  
 <213> Homo sapiens

<400> 1451  
 aggcctctgg cgagttgatc tacagcttcg gaccgggtgc tatggctact ggcgtcaagt  
 60  
 acacgaacac agtttgcact cctgtgggcg actacgaggt ggtgctgacg gattcttggg  
 120  
 gtgatggctg gaacccgggt tcttacctga acatgtacga cagctcggac aacttgatcc  
 180  
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct  
 240  
 tcacgggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg  
 300



tggacaagga gtggaactct gtggac  
326

<210> 1452  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 1452  
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly  
1 5 10 15  
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro  
20 25 30  
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu  
35 40 45  
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His  
50 55 60  
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys  
65 70 75 80  
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp  
85 90 95

<210> 1453  
<211> 326  
<212> DNA  
<213> Homo sapiens

<400> 1453  
cggccgcgcg gccccacgtg caccgcgtgc atggtccttc gaggacgcgc atctgcagcc  
60  
cccgtccccc gcaaacctcc aggccggaga gtcctggcca aggccgctgc atcacatgat  
120  
acaggagggg catgcacacg ctacacgtgca cacagcctca aacacgctca tccgtacata  
180  
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac  
240  
cgactcgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg  
300  
cgtgtgcaca tcacccacac ggacac  
326

<210> 1454  
<211> 98  
<212> PRT  
<213> Homo sapiens

<400> 1454  
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro  
1 5 10 15  
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ser His Asp Thr Gly  
20 25 30  
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro  
35 40 45  
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

```

      50              55              60
Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
65              70              75              80
Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
      85              90              95
Thr Asp

```

<210> 1455  
 <211> 314  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1455
gatccagtca aaaaagcatg tgggggttgct cacgctgggt ggaaagggtac tttgttgggt
60
gttgctatgg ctacagtga tgcctatgata gcagaatatg gctgcocttt ggaaaaactt
120
tgggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
180
gaggcatttc ataatcttca tcttgcattg gtacaactat ttgattcacc aaatccctgt
240
atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg ctctctgct
300
ccttccaaac tgac
314

```

<210> 1456  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1456
Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
1      5      10      15
Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
20     25     30
Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
35     40     45
Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
50     55     60
Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
65     70     75     80
Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
85     90     95
Cys Phe Leu Pro Pro Ser Lys Leu
100

```

<210> 1457  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta  
 60  
 gcacatgcat tgctaaaatc ggcgcccaga accttctctg cccctctccc atgggatgca  
 120  
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct ccccaggaaa  
 180  
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg  
 240  
 gtggggggaca caggaagtcc acgcttgacac ggagggggacg ggcacaccta ccgtgactgc  
 300  
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac  
 360  
 aactccagcc cacaaccaag tcaactgggct gcctaccac tgcccaagtg cctcaagtca  
 420  
 acacattcct gcactgn  
 437

&lt;210&gt; 1458

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5					10					15	
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
			20					25					30		
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
		35					40					45			
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55					60				
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65					70				75					80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Tyr	Pro	Leu	Pro	Lys	
			85						90				95		
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
			100					105							

&lt;210&gt; 1459

&lt;211&gt; 295

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1459

ngagaggtca ccggccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgacccg  
 60  
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc  
 120  
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggtcggggg ggccgaacgg  
 180  
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc  
 240  
 gccactgcgg tgtcgagcat gccctccac tccccgatcg ccatgagctg gcgan  
 295

<210> 1460  
 <211> 60  
 <212> PRT  
 <213> Homo sapiens

<400> 1460  
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg  
 1 5 10 15  
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg  
 20 25 30  
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu  
 35 40 45  
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg  
 50 55 60

<210> 1461  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 1461  
 nnaagcttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg  
 60  
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca  
 120  
 gaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcatt atcccgtgaa  
 180  
 gaagcacaaa ttcgcggtga agcgcttaat ctaacgcctt atgatgcgat gcttgataag  
 240  
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaaggt aaagacgtgg  
 300  
 ttacctacgt taattgaaaa agcgtagtaa aagcagcaat cagaatctat cattatgcca  
 360  
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta  
 420  
 aaattcgact tt  
 432

<210> 1462  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 1462  
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val  
 1 5 10 15  
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu  
 20 25 30  
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu  
 35 40 45  
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile  
 50 55 60  
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

65					70					75				80	
Phe	Glu	Pro	Gly	Thr	Thr	Thr	Val	Ser	Leu	Asn	Thr	Leu	Phe	Ser	Lys
				85					90					95	
Val	Lys	Thr	Trp	Leu	Pro	Thr	Leu	Ile	Glu	Lys	Ala	Leu	Glu	Lys	Gln
			100					105					110		
Gln	Ser	Glu	Ser	Ile	Ile	Met	Pro	Ser	Gly	Thr	Phe	Ser	Thr	Ala	Asn
			115				120					125			
Gln	Lys	Ala	Leu	Gly	Leu	Glu	Ile	Met	Lys	Leu	Leu	Lys	Phe	Asp	Phe
			130				135					140			

&lt;210&gt; 1463

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1463

```

nagcggttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaagtca tggggcgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtag atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

```

&lt;210&gt; 1464

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1464

Xaa	Ala	Phe	Gln	Ser	Lys	Leu	Asp	Leu	Thr	Ala	Phe	Glu	Phe	Phe	Ser
1				5					10				15		
Asp	Lys	Ala	Leu	Ala	Lys	Val	Met	Gly	Arg	Gly	Asp	Val	Pro	Ala	Pro
			20					25				30			
Phe	Glu	Thr	Glu	Cys	Pro	Phe	Tyr	Ala	Leu	Leu	Glu	Phe	Glu	Ala	Thr
			35				40					45			
Thr	Glu	Glu	Val	Ala	Asn	His	Ala	Leu	Glu	Thr	Phe	Glu	His	Cys	Val
			50			55					60				
Glu	Gln	Gly	Trp	Val	Leu	Asp	Gly	Val	Met	Ser	Gln	Ser	Glu	Thr	Gln
65					70				75				80		
Leu	His	Asn	Leu	Trp	Lys	Leu	Arg	Glu	Tyr	Ile	Ser	Glu	Thr	Ile	Ser
			85					90				95			
His	Trp	Thr	Pro	Tyr	Lys	Asn	Asp	Ile	Ser	Val	Thr	Val	Ser	Lys	Val
			100					105				110			
Pro	Ala	Phe	Leu	Lys	Glu	Ile	Asp	Ala	Ile	Val	Val	Ser	Ile	Thr	Arg

115                                      120                                      125  
 Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala  
 130                                      135                                      140

<210> 1465  
 <211> 424  
 <212> DNA  
 <213> Homo sapiens

<400> 1465  
 gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggt agatggcatg  
 60  
 cagcctctcg ggcgggaaag tggctacag tgctgcttg cccgggcagg cagctcgtag  
 120  
 gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca  
 180  
 caacctcacc gaattcaaac tccggtggat ttcccacgcc gagcagtgga aggcggaaaa  
 240  
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg  
 300  
 gaccttggcc acggaagttt tcggtcaagc acccgaattc gacttcccat atatgaaact  
 360  
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt  
 420  
 cacg  
 424

<210> 1466  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1466  
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu  
 1                                      5                                      10                                      15  
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro  
 20                                      25                                      30  
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe  
 35                                      40                                      45  
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg  
 50                                      55                                      60  
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly  
 65                                      70                                      75                                      80  
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe  
 85                                      90                                      95  
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe  
 100                                      105                                      110  
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr  
 115                                      120

<210> 1467  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1467

nacgcgtgac ggcgaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg  
 60  
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa  
 120  
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt  
 180  
 cgtacgtatg cgctctgtgt gatgggtcatg acaacgtgga atgccacgat cctaggccccg  
 240  
 gccaaactcgg tgcattgagaa ccgcatatac tgccctgcgcc tcgtgtgtgg cgactcgtac  
 300  
 cctcttgtgc cgcctgagat ttggttccag acgcgcatca acttgccgtg cgtcgatgcc  
 360  
 cacacggggc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac  
 420  
 actatggaaa gctgctgcat g  
 441

&lt;210&gt; 1468

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
			20					25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
			35				40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
	50					55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65				70					75					80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
			85					90					95		
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
			100					105					110		
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115					120								

&lt;210&gt; 1469

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1469

nnctcgate tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg  
 60  
 gcgttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt  
 120  
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt  
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttgggc catttggcgc tggattactt  
 240  
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg  
 300  
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttgggtg cgtaatcgca  
 360  
 gggtcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact  
 420  
 cctctcgta caggaatcgt cgttctgttg attggtctac cattaatg  
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1				5					10					15	
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
		20						25					30		
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
	35						40					45			
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
	50					55					60				
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65				70						75				80	
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
			85						90					95	
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
		100						105					110		
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
	115						120					125			
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
	130					135					140				
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145				150						155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

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 gttatcgatc agccgctgac gattttgcac accaatctgg cggtgtatat cggcattgtg  
 120  
 tacgcttata tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac  
 180  
 tcgctgggtgg aggcctcact ggatctcggg gcccgccgc tgaaaacggt tttcaatgtg  
 240  
 attgtcccgcc tcaccaaagg cggcattatc gcggggtcga tgctgggtgtt tatcccggcg  
 300



gtcgggtgagt ttgttatccc ggaactgctc ggcggcggcc g  
341

<210> 1472

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1472

Ala	Trp	Met	Gly	Ile	Leu	Lys	Asn	Asn	Gly	Val	Leu	Asn	Asn	Phe	Leu
1				5					10					15	
Leu	Trp	Leu	Gly	Val	Ile	Asp	Gln	Pro	Leu	Thr	Ile	Leu	His	Thr	Asn
			20					25					30		
Leu	Ala	Val	Tyr	Ile	Gly	Ile	Val	Tyr	Ala	Tyr	Leu	Pro	Phe	Met	Val
			35				40					45			
Leu	Pro	Ile	Tyr	Thr	Ala	Leu	Thr	Arg	Ile	Asp	Tyr	Ser	Leu	Val	Glu
			50				55				60				
Ala	Ser	Leu	Asp	Leu	Gly	Ala	Arg	Pro	Leu	Lys	Thr	Phe	Phe	Asn	Val
65					70					75				80	
Ile	Val	Pro	Leu	Thr	Lys	Gly	Gly	Ile	Ile	Ala	Gly	Ser	Met	Leu	Val
				85				90						95	
Phe	Ile	Pro	Ala	Val	Gly	Glu	Phe	Val	Ile	Pro	Glu	Leu	Leu	Gly	Gly
			100					105						110	

Gly

<210> 1473

<211> 352

<212> DNA

<213> Homo sapiens

<400> 1473

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60  
gaaactgacg gaaatgttca aactccagtt tgttggttaag cagatcacta aacttaaaat  
120  
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg  
180  
ataaaaatgcc agttccaatt tcacaagtgg tgtcctcagc tttcttgga aatgtctctt  
240  
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttcacca  
300  
gtccacctt tttataagca atttgggtccg attttaccat ctttgtccat gg  
352

<210> 1474

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1474

Met	Val	Lys	Ser	Asp	Gln	Ile	Ala	Tyr	Lys	Lys	Val	Glu	Leu	Val	Glu
1					5				10					15	
Glu	Thr	Arg	Gln	Leu	Asp	Ser	Thr	Tyr	Phe	Arg	Lys	Leu	Gln	Ala	Leu

```

      20      25      30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
      35      40      45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
      50      55      60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
65      70      75      80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
      85      90      95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
      100      105      110
Arg

```

<210> 1475  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1475
accggtgccg gagccgatct ccacgatggc cttggcgccg gtgcggccga accactcatc
60
gacatcgata agtcctatcg ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
120
ctgggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgcc aggcgcgggt
180
agtccaggtc attatcaaag accgcattga agtccgtttg cggcggggcga cccggcggca
240
tttctccggc aggggggtgt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtattt tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtggtgtc
389

```

<210> 1476  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1476
Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
1      5      10      15
Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
      20      25      30
Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
      35      40      45
Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
50      55      60
Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
65      70      75      80
Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
      85      90      95
Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

```

100 105 110  
 Asp Asn Arg Ser Leu Thr Gly Trp Cys  
 115 120

<210> 1477  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1477  
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 60  
 ttccctccctt atttgctggg ccaaacggac ggccaaccta aagatgcca atgggcatcg  
 120  
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcggccaac  
 180  
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg  
 240  
 tggatgacgg tagtgctggc ggcgatgctt ggccaaatcg gcttaccggg cggcgggttc  
 300  
 ggttttggtt ggccctccaa cggcgcaggt acccccgagc cgcaaggggt gatcctgagc  
 360  
 ggtttctccg gttccccgc tacgccggca cgccatgcc agggggattt caaagggttac  
 420  
 agcagtacca ttccgatgc gcgctttatc gatgccatgc tggagccggg caaggagatc  
 480  
 gattggaatg gcaaacgcgt  
 500

<210> 1478  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1478  
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val  
 1 5 10 15  
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln  
 20 25 30  
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu  
 35 40 45  
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile  
 50 55 60  
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala  
 65 70 75 80  
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro  
 85 90 95  
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro  
 100 105 110  
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr  
 115 120 125  
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile  
 130 135 140  
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

145                      150                      155                      160  
Asp Trp Asn Gly Lys Arg  
                         165

<210> 1479  
<211> 421  
<212> DNA  
<213> Homo sapiens

<400> 1479  
acgcgtgtgg agctggcacc atgaaagcac gatgtgcatc actcatagag gcaggcacac  
60  
ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca  
120  
cgctgggctt tttttgtttg ctgttttggg tgggggtgtgc tagtgcagtg tccggtgtac  
180  
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattggt gctggtaaac  
240  
aaatgccaaag tttgacaaaa aacagtgaag taaagcaaaa gattttgaaa aatgcttcat  
300  
catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gccagcctg  
360  
agaccctatt gactttgaat tatcttttgc tgttttatct ctatgaaaat tatatacgcg  
420  
t  
421

<210> 1480  
<211> 133  
<212> PRT  
<213> Homo sapiens

<400> 1480  
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr  
1                      5                      10                      15  
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala  
20                      25                      30  
Ser Thr Leu Gly Phe Phe Cys Leu Leu Phe Trp Val Gly Cys Ala Ser  
35                      40                      45  
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly  
50                      55                      60  
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys  
65                      70                      75                      80  
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln  
85                      90                      95  
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln  
100                      105                      110  
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr  
115                      120                      125  
Glu Asn Tyr Ile Arg  
130

<210> 1481  
<211> 545

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1481

```

gtcgggtcgc cgcccagtct cgtgccgaca tgcagttcct ggcccgggag gtcgcatcca
60
tccggatgca gatgggagcag ttggccacgc gcgattatct gcgctcggag ctacgcgacg
120
agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgacccggt
180
tcgcgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc
240
gagaacccag tgggtaaggc cattgccgat gcggtgtcgc acgtcaatga ccccgagatc
300
aaacgccccca ttaccgatct caacatgatt gatgagatta ccgctcgacga gcaaggacgc
360
gctttcgtcc gcatectgct gaccgtcgcc ggggtgtcccc tcaagaccga gctgcgtgag
420
caggccaccg aggctgtgag cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
480
accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
540
cgcggt
545

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&lt;210&gt; 1482

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1482

```

Met Ser Thr Glu Asn Pro Val Val Lys Ala Ile Ala Asp Ala Leu Ser
1      5      10      15
His Val Asn Asp Pro Glu Ile Lys Arg Pro Ile Thr Asp Leu Asn Met
20     25     30
Ile Asp Glu Ile Thr Val Asp Glu Gln Gly Arg Ala Phe Val Arg Ile
35     40     45
Leu Leu Thr Val Ala Gly Cys Pro Leu Lys Thr Glu Leu Arg Glu Gln
50     55     60
Ala Thr Glu Ala Val Arg Ser Val Asp Gly Val Thr Ser Val Ser Val
65     70     75     80
Glu Leu Gly Thr Met Thr Asp Glu Gln Arg Asp Ala Leu Lys Val Gln
85     90     95
Leu Arg Gly Asp Val Pro Glu Arg
100

```

&lt;210&gt; 1483

&lt;211&gt; 625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1483

```

gtacggcttc gagagggcta cagtgtccga gaggtcacac tggccaaagg aggggtcccaa
60

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ttggaggtaa agctgggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg  
 120  
 gcatacctggc ccttggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa  
 180  
 ggcggtacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg  
 240  
 tatcgtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac  
 300  
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttcctgac  
 360  
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccgggtgctc  
 420  
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgccta ctggaagccc  
 480  
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcctgggtgct  
 540  
 aatcctggag catgacacac caatcccaa gcacttgac accccgggca gcaatgggag  
 600  
 ctactacgga gagaagacaa cgcgt  
 625

&lt;210&gt; 1484

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
1				5					10					15	
Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35					40					45			
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55				60					
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85					90						95	
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
		100					105					110			
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
	115					120					125				
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130				135					140					
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145				150					155					160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

&lt;210&gt; 1485

&lt;211&gt; 2058

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1485

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ctgttcctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatatTTTT
120
gttggcgata ttactttctga atcaccgtct aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatgggtggga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcgттааg
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aaggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcgaccga tagctttgga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcaactaacg
660
ggatgatggtg ttgtagtgcc ggttgatatc cacatagcca ctcatatTTT tgaccagtg
720
atggagcgtg tgtttgagga tgcggcgagg ctgcttaagc aaatcgcata gcatcgTTTT
780
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg
840
aatcctatgc agaagccttg aaagttgagg ccataagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggctcttttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgTTTTaaat tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taactctcaa ttctgggcgc aaagctgcta ttgagctgaa aggggtgcctt gatggcaata
1140
acactaacat ctttgatcgc cccctcagg cagaagaatt tgttatctgg agtgatatgca
1200
caaatcctgg tgctgaccct cagcataatg tttggctctg gttcacacc agactaagtg
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttggtg
1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgtttgt atcttttacc ttcgacgatt ccaagcccaa
1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaatc aaagcgTTTT
1500
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acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatt  
 1560  
 atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatggtg gagcgtgaat  
 1620  
 cggaatgac ggcaataagg cggctttaat ttgtgcatgc ctatgctgca tgaatccgca  
 1680  
 tgatcgtttg aggatcgttt ttgctgaggc cgcgcagttc tgggtgggctt ttgcttatgt  
 1740  
 catgcacctg catgaaaacc gctacataaa gcgggcaggc gtggcgggga tacgagcgcg  
 1800  
 cgcaacgggg tgaaatggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc  
 1860  
 gggtaggggtg agtgagaggc agcaataaag aagcgccccg cagaatgctg ctggggcgct  
 1920  
 gtgagagggtg gtcttgttgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca  
 1980  
 gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc  
 2040  
 gcagtcgctt ctgcaggc  
 2058

<210> 1486  
 <211> 256  
 <212> PRT  
 <213> Homo sapiens

<400> 1486  
 Xaa Cys Ser Ala Phe Asn Asp Ile Gly Tyr His Tyr Gly Ala Met Val  
 1 5 10 15  
 Val Asp Ala Ala Leu Phe Leu Pro Gln Ser Arg Pro Arg Leu Phe Ile  
 20 25 30  
 Ile Gly Val Arg Asn Asp Ile Phe Val Gly Asp Ile Thr Ser Glu Ser  
 35 40 45  
 Pro Ser Lys Met Trp His Thr Arg Thr Leu Leu Asn Ala Tyr Ser Asn  
 50 55 60  
 Leu Lys Asp Asp Ala Lys Ser Asn Trp Val Trp Trp Asp Leu Pro Met  
 65 70 75 80  
 Pro Ala Gln Arg Lys Ser Ala Phe Ala Asp Leu Ile Glu Glu Asn Pro  
 85 90 95  
 Ser Ser Val Lys Trp His Thr Arg Lys Glu Thr Gln Gln Leu Leu Asp  
 100 105 110  
 Met Met Thr Asp Val Asn Leu Ala Lys Val Glu Ala Ala Lys Lys Leu  
 115 120 125  
 Ser Ile Glu Ser Lys Glu Asn Val Val Gly Thr Ile Tyr Lys Arg Thr  
 130 135 140  
 Arg Thr Asp Ser Phe Gly Val Lys Ala Gln Arg Ala Glu Val Arg Phe  
 145 150 155 160  
 Asp Asp Val Ala Gly Cys Leu Arg Thr Pro Gly Gly Gly Ser Ser Arg  
 165 170 175  
 Gln Val Ile Met Val Val Asp Asn Gly Thr Val Lys Thr Arg Leu Ile  
 180 185 190  
 Ser Ser Arg Glu Thr Ala Arg Leu Met Gly Leu Pro Asp Glu Tyr Ile  
 195 200 205  
 Leu Pro Lys Asn Tyr Asn Glu Ala Tyr His Leu Thr Gly Asp Gly Val



210	215	220
Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val		
225	230	235
Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala		240
245	250	255

<210> 1487  
 <211> 823  
 <212> DNA  
 <213> Homo sapiens

<400> 1487  
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 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg  
 120  
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 180  
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 240  
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 300  
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc  
 360  
 gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagcccttcc tcttggggac  
 420  
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 480  
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 540  
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 600  
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 660  
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 720  
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 780  
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 823

<210> 1488  
 <211> 149  
 <212> PRT  
 <213> Homo sapiens

<400> 1488  
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu  
 1 5 10 15  
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu  
 20 25 30  
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg  
 35 40 45  
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

50                      55                      60  
 Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg  
 65                      70                      75                      80  
 Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala  
                     85                      90                      95  
 Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly  
                     100                      105                      110  
 Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile  
                     115                      120                      125  
 Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met  
                     130                      135                      140  
 Ala Leu Gly Arg Ala  
 145

<210> 1489

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1489

nnccagttca ccgtcaagct ggccgcggcc ggcgaacaca atgtgcgcaa tgcgctggcc  
 60  
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 120  
 gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc  
 180  
 attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc  
 240  
 cgcgtacccg cgccgcgcat cctgggtggtg ggcgacatgg gcgaagtcgg cgcacagggg  
 300  
 aaagaatttc acgaagaaat cggggcttac gcacacacgc gt  
 342

<210> 1490

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1490

Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg  
 1                      5                      10                      15  
 Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln  
                     20                      25                      30  
 Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg  
                     35                      40                      45  
 Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr  
                     50                      55                      60  
 His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala  
 65                      70                      75                      80  
 Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val  
                     85                      90                      95  
 Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His  
                     100                      105                      110  
 Thr Arg

<210> 1491  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 1491  
nctcgttgt tctcatagag ggctacggca tcgcgtttga actgttcgga gtacctggac  
60  
atgggggtag attacctttc ttcccagctc gactgggctg gatatcaggt gtccaccaca  
120  
tgggggtcag gtcccaactcc caaaggagta gccatcaccc acgagtcggc ggtcaatacg  
180  
attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca  
240  
gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc  
300  
ttggtgttgc catctccagc agacaaacgt gat  
333

<210> 1492  
<211> 91  
<212> PRT  
<213> Homo sapiens

<400> 1492  
Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln  
1 5 10 15  
Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile  
20 25 30  
Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu  
35 40 45  
Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe  
50 55 60  
Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr  
65 70 75 80  
Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp  
85 90

<210> 1493  
<211> 1316  
<212> DNA  
<213> Homo sapiens

<400> 1493  
nggtaccagg gcaaagaagg ctgggcccc gcctcctacc taaagaagaa cagtggggag  
60  
cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgccct tgacttggat  
120  
ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg  
180  
gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag  
240

atgaggcaga gacccccctcc tcgccggggac atgaccattc ctcgaggcct caacctgccg  
 300  
 aagccgcccc tcccccccca agtggaggaa gagtattaca ccatcgccga attccagaca  
 360  
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggtgat cgagaaaaac  
 420  
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc  
 480  
 attgacaagt acaagaagac gagcaacgcg tcgagacca actttctggc tccccctgcc  
 540  
 cacgaggtga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc  
 600  
 gaagccacgg gccctctccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg  
 660  
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac  
 720  
 atgtctgcgt cagcaggcta cgaggagatc tcagaccccg acatggagga gaagcccagc  
 780  
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg  
 840  
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg  
 900  
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa  
 960  
 cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag  
 1020  
 gtcttggcca aggaagtga gaagcccaac ctccggcca tctccaaatc caaaactgac  
 1080  
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag  
 1140  
 gttaggccaa aaccagctcc tcccccaaa acggagccac ctcagggcga agaccaagtc  
 1200  
 gacatctgca acctcaggag taagctcagg cctgccaaagt cccaagacaa gtccttgttg  
 1260  
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt  
 1316

&lt;210&gt; 1494

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5					10					15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35				40					45			
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
			50			55				60					
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70					75				80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly



ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtccggga  
 120  
 gagggcaggc cgcgacatg gggcatgtgg cgatgtgttt caccaccac tcccgcctga  
 180  
 agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctctgcagc  
 240  
 agaccacct cctcagcctc cttcccctga aggctgggca tggcctggac aaaggggtgc  
 300  
 ctctctgct gtgccatgct gacgtggca  
 329

&lt;210&gt; 1496

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1496

Met	Ala	Gln	Gln	Arg	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1			5						10					15	
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
		20						25					30		
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35					40					45			
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55					60				
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65				70					75					80	
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
			85					90					95		
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

&lt;210&gt; 1497

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1497

naacttcttg cactcactca ggcgacacggt tggcggccga cttggaagcc gctgcagcac  
 60  
 ttgacgcggg gcgatctcga agcggttcggt cttggcctga cggtcgatgg ctgcggcgtg  
 120  
 ccgttgatcg cgcgaaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa  
 180  
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga  
 240  
 caagaagcgg atcccgacgc tgctgcgtgt tgagctcact gaacttacgg gcccgatcga  
 300  
 gcagccttac gcgcccgatg caggtcattc tttcggggca cgcgt  
 345

&lt;210&gt; 1498

&lt;211&gt; 104

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
      20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
      35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
      50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ala Ser Lys
      85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
      100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

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aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcac tctttggctg
180
gatgcacaat cacaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtatatttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
      20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
      35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
      50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
      85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
      100          105          110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
      115          120          125
Pro Ala Ser Thr Leu Ser
      130

```

<210> 1501  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1501
nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttctctg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacgggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcggaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggccg cccatcaage
360
tt
362

```

<210> 1502  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1502
Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
1          5          10          15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
      20          25          30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
      35          40          45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
      50          55          60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65          70          75          80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
      85          90          95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
      100          105          110
Leu Arg Glu Gly Arg Pro Ser Ser
      115          120

```



<210> 1503  
 <211> 623  
 <212> DNA  
 <213> Homo sapiens

<400> 1503  
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 60  
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa  
 120  
 gggctcatga cgacccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct  
 180  
 gtgagtccctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc  
 240  
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag  
 300  
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgctg gtgggtgccag  
 360  
 attcacgggtt accgaaaccc ggtcctcgac gaggcctca accgtcaaag ctcccagttc  
 420  
 agtcacgtca tgtttgccg actcaccat aaggccgcgg ttgacgccgt catatcccta  
 480  
 gtgcgcctgg ccccggggcc cctcgaccgg atcttctctgg ctgattccgg gtctgtcggc  
 540  
 gtcgaggtga gtctcaaatt ggtcgtcag gtgcaaactg ctcgcaccgc agcgcgcggc  
 600  
 ggcactttga cgaggacacg cgt  
 623

<210> 1504  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 1504  
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe  
 1 5 10 15  
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His  
 20 25 30  
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala  
 35 40 45  
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His  
 50 55 60  
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His  
 65 70 75 80  
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser  
 85 90 95  
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val  
 100 105 110  
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg  
 115 120 125  
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys  
 130 135 140  
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr



130		135		140
Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly				
145		150		155
Tyr Arg Thr Glu Ile Arg Gln Tyr Ala				160
	165			

<210> 1507  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

<400> 1507  
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 120  
 gtgagacttg ggtggggaca cagtgggaaca tgaagtgtgc cacgctgggt ggatgacgcc  
 180  
 ctctctcccc cgccaccgag agctgcaggc cacatgatc cttttgggta gcactcggga  
 240  
 aagggcagaa tgtacaggaa cagagtgaga ttgcagggc ctggggctga gggaggggac  
 300  
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 360  
 tgggtggtggc tgcacagtgg cccacaccgc tcagagctca cctgcctgca cccaggccct  
 420  
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 540  
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 660  
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 667

<210> 1508  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1508  
 Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly  
 1 5 10 15  
 Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His  
 20 25 30  
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser  
 35 40 45  
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln  
 50 55 60  
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly  
 65 70 75 80  
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

85 90 95  
 Ser Trp Thr Thr Ala Val Leu Ser Gly Gly Val Trp Trp Leu Gly Ala  
 100 105 110  
 Arg Leu Leu Leu Leu Gln Thr Leu Gly Ser Arg Ala Pro Pro Val  
 115 120 125  
 Gly Gln Cys Gly Leu Leu Gln Gly Thr His Ala  
 130 135

<210> 1509  
 <211> 463  
 <212> DNA  
 <213> Homo sapiens

<400> 1509  
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 60  
 ggtctggctg actccaaagt tgtggctttt gttggttttc ttgttctgtc gcgttttaga  
 120  
 aagggctagg aaccgagcac tgggcgttgg gcttactctc ctctatggg gacctgggag  
 180  
 tggtgcccaa ggcgtctct tcccagcacc tcagggtcct cactggtaaa ggagggagtg  
 240  
 attggaatgt cgccaaagt acttggctct ggaattctgt ggctattcac gtggactctg  
 300  
 gatggcggtc accaagtaga agagggggccc tgggatagag agaagtctcc tctcctgctc  
 360  
 ctgatttccc aggcctctcc ctctcctggc cctccctcct ttcttccact tccccggatt  
 420  
 cccttcgagt ttggttgcaa ctttaatttt nngttccgat tca  
 463

<210> 1510  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 1510  
 Met Val Thr Trp Glu Trp Cys Pro Arg Arg Ser Leu Pro Ser Thr Ser  
 1 5 10 15  
 Gly Ser Ser Leu Val Lys Glu Gly Val Ile Gly Met Ser Pro Lys Leu  
 20 25 30  
 Leu Gly Ser Gly Ile Leu Trp Leu Phe Thr Trp Thr Leu Asp Gly Gly  
 35 40 45  
 His Gln Val Glu Glu Gly Pro Trp Asp Arg Glu Lys Ser Pro Leu Leu  
 50 55 60  
 Leu Leu Ile Ser Gln Ala Ser Pro Ser Pro Gly Pro Pro Ser Phe Leu  
 65 70 75 80  
 Pro Leu Pro Arg Ile Pro Phe Glu Phe Gly Cys Asn Phe Asn Phe Xaa  
 85 90 95  
 Phe Arg Phe

<210> 1511  
 <211> 633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1511

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gccggcaccg gcgtaaggc catggcgctg ggcccgggat gggtaacacac cgaattccac
60
tcacgcgcca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt
120
ctggtagcgc aggtctctca cgaccttgac catgacaagg tagtatccat tcctaccccg
180
ctctggaagt tcttcacgc agtggccaca catacccccac gttccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggagggc
300
gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
360
gtccgcccgc acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt
420
cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacgggt ccttacgctc
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaagc
540
ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
600
aggccatcgc tccggtgctc ttcttcaacg cgt
633

```

&lt;210&gt; 1512

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1512

```

Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
1           5           10           15
Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
20          25          30
Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
35          40          45
Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
50          55          60
Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
65          70          75          80
Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
85          90          95
Thr Pro Gly Gly Glu Ala
100

```

&lt;210&gt; 1513

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1513

acgcgtgaag ggggtggaatt tcaccacaga ggggacgccg gggttcctgt tcagaaatat  
60  
ttggtcgtcc aatctcgtaa tgcccttctg aatgacttgc tgggcctgcc tcctgacacg  
120  
gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggtcgtgctc  
180  
ttctgggac ttcacgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccg  
240  
tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgtccgcg tcgtccgcag  
300  
tctgctctgg gcccttgctg aacatcttcc gtgtccgggg gaactggtgg gagtgaagggg  
360  
tgtactgcgc cccagcgggg cctgtggtgc ccggccggcc g  
401

&lt;210&gt; 1514

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Asp	Ala
1				5					10				15		
Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe	Cys
			20					25				30			
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
		35					40				45				
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
	50					55				60					
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
65					70				75					80	
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
			85					90					95		
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala				
			100					105							

&lt;210&gt; 1515

&lt;211&gt; 720

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1515

nnggatcctg accgcggcat gaggttcaac cctgccaaagc tattgctcga cccttatgcc  
60  
agggccatca cggcaggagt cgattatcac ggcccgatta tggaccacac gccggaatcc  
120  
aactacgagc ctgacctgac cgacgatgcg acgtcgggcc cgctcgccgt cgtcattgac  
180  
gatccccggcc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat  
240  
gagacccatg tcaaagggct aaccgcctt caccctctcg ttcttgagca tcttcgcagc  
300  
acctatgccg ggcttgcccta tccggctgtt atcgaacacc tcaagtcaat cggagtaaca  
360

gccatcgaac tactacccgt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc  
 420  
 ttatccgatt actgggggtta caacaccctg ggggttctttg cgccgcatgc tgcctactgc  
 480  
 tccgtcggtt cgatgggaac ccaggtgcgc gagttcaagg acatggtgac gtctttccac  
 540  
 gaagccggca tcgaggtttt cctcgatgtc gtctacaacc aactggtga gggcggccat  
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 720

<210> 1516  
 <211> 240  
 <212> PRT  
 <213> Homo sapiens

<400> 1516  
 Xaa Asp Pro Asp Arg Gly Met Arg Phe Asn Pro Ala Lys Leu Leu Leu  
 1 5 10 15  
 Asp Pro Tyr Ala Arg Ala Ile Thr Ala Gly Val Asp Tyr His Gly Pro  
 20 25 30  
 Ile Met Asp His Thr Pro Glu Ser Asn Tyr Glu Pro Asp Leu Thr Asp  
 35 40 45  
 Asp Ala Thr Ser Val Pro Leu Ala Val Val Ile Asp Asp Pro Gly Pro  
 50 55 60  
 Pro Thr Pro Ile Ala Arg Arg His Asp Ile Ser Glu Ser Gly Ile Tyr  
 65 70 75 80  
 Glu Thr His Val Lys Gly Leu Thr Arg Leu His Pro Leu Val Pro Glu  
 85 90 95  
 His Leu Arg Ser Thr Tyr Ala Gly Leu Ala Tyr Pro Ala Val Ile Glu  
 100 105 110  
 His Leu Lys Ser Ile Gly Val Thr Ala Ile Glu Leu Leu Pro Val Gln  
 115 120 125  
 Gln Phe Val Ser Glu Pro Phe Ile Val Gly Arg Gly Leu Ser Asp Tyr  
 130 135 140  
 Trp Gly Tyr Asn Thr Leu Gly Phe Phe Ala Pro His Ala Ala Tyr Cys  
 145 150 155 160  
 Ser Val Gly Ser Met Gly Thr Gln Val Arg Glu Phe Lys Asp Met Val  
 165 170 175  
 Thr Ser Phe His Glu Ala Gly Ile Glu Val Phe Leu Asp Val Val Tyr  
 180 185 190  
 Asn His Thr Gly Glu Gly Gly His Glu Gly Pro Thr Leu Ser Phe Arg  
 195 200 205  
 Gly Ile Asp His Glu Ser Tyr Tyr Arg Leu Thr Asn Asp His Arg Asn  
 210 215 220  
 Asp Tyr Asp Val Thr Gly Cys Gly Asn Ser Val Asp Thr Ser His Pro  
 225 230 235 240

<210> 1517  
 <211> 497  
 <212> DNA  
 <213> Homo sapiens

<400> 1517  
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 60  
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 120  
 tcctttttcca tcgggctgca agtactgttt ccattcctcc tggcaggctt tgggaccgtg  
 180  
 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttccagaa ggtgacagag  
 240  
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gaccctggca  
 300  
 tcaaggcttt ccactgcagc caacattgga cacatggaca cacccaagga gctctggcgg  
 360  
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cggtggtggg cttcctggcg  
 420  
 tccatgcag ccgtcgtctt tggctggatc cctgatggcc acttcagtat tccgcacgcc  
 480  
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 497

<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518

Xaa	Arg	Val	Lys	Gly	Val	Arg	Glu	Glu	Asp	Ala	Leu	Leu	Glu	Asn	Gly
1				5					10					15	
Ser	Gln	Ser	Asn	Glu	Ser	Asp	Asp	Val	Ser	Thr	Asp	Arg	Gly	Pro	Ala
			20					25					30		
Pro	Pro	Ser	Pro	Leu	Lys	Glu	Thr	Ser	Phe	Ser	Ile	Gly	Leu	Gln	Val
		35					40					45			
Leu	Phe	Pro	Phe	Leu	Leu	Ala	Gly	Phe	Gly	Thr	Val	Ala	Ala	Gly	Met
	50					55					60				
Val	Leu	Asp	Ile	Val	Gln	His	Trp	Glu	Val	Phe	Gln	Lys	Val	Thr	Glu
65					70					75				80	
Val	Phe	Ile	Leu	Val	Pro	Ala	Leu	Leu	Gly	Leu	Lys	Gly	Asn	Leu	Glu
			85						90					95	
Met	Thr	Leu	Ala	Ser	Arg	Leu	Ser	Thr	Ala	Ala	Asn	Ile	Gly	His	Met
			100						105					110	
Asp	Thr	Pro	Lys	Glu	Leu	Trp	Arg	Met	Ile	Thr	Gly	Asn	Met	Ala	Leu
		115					120					125			
Ile	Gln	Val	Gln	Ala	Pro	Val	Val	Gly	Phe	Leu	Ala	Ser	Ile	Ala	Ala
	130					135					140				
Val	Val	Phe	Gly	Trp	Ile	Pro	Asp	Gly	His	Phe	Ser	Ile	Pro	His	Ala
145					150					155					160
Phe	Leu	Leu	Cys	Gly											
				165											

<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens



<400> 1519  
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120  
cttacaaaaa ttgaaggagt gctctctggg gatccacttg atctgaaaat gtttgaggct  
180  
attggatgga ttctggaaga agcaactgaa gaagaaacag cacttcataa tcgaattatg  
240  
cccacagtgg ttcgtcctcc caaacaactg cttcctgaat ctaccctgc aggaaaccaa  
300  
gaaatggagc tgtttgaact tccagctact tatgagatag gaattgttcg ccagttccca  
360  
ttttcttctg ctttgcaacg tatgagtgtg gttgccaggg tgctggggga taggaaaatg  
420  
gacgcctaca tgaaggagc gcccgaggcc attgccggtc tctgtaaacc tgaaacagtt  
480  
cctgtcgatt ttcaaaacgt tttggaagac ttcactaaac agggcttccg tgtgattgct  
540  
cttgacaca gaaaattgga gtcaaaactg acatggcata aagtacagaa tattagcaga  
600  
gatgcaattg agaacaacat ggattttatg ggattaatta taatgcagaa caaattaaag  
660  
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720  
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780  
caggataaag tgattattgc tgaagcatta cctccaaagg atgggaaagt tgccaaaata  
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1560

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 1620  
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 1680  
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 1740  
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 1800  
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 1860  
 tctgttgacc aggttcttca gatagtgtgt gtaccatata agtggcgtgt aactatgctc  
 1920  
 atcattgttc ttgtcaatgc ctttgtgtct atcacagtgg agaacttctt ccttgacatg  
 1980  
 gtcctttgga aagttgtgtt caaccgagac aaacaaggag agtatcggtt cagcaccaca  
 2040  
 cagccaccgc aggagtcagt ggatcggtgg ggaaaa  
 2076

<210> 1520  
 <211> 692  
 <212> PRT  
 <213> Homo sapiens

<400> 1520  
 Xaa Asp Leu Trp Gly Ile Gln Arg Val Glu Asn Ala Arg Phe Leu Ser  
 1 5 10 15  
 Pro Glu Glu Asn Val Cys Asn Glu Met Leu Val Lys Ser Gln Phe Val  
 20 25 30  
 Ala Cys Met Ala Thr Cys His Ser Leu Thr Lys Ile Glu Gly Val Leu  
 35 40 45  
 Ser Gly Asp Pro Leu Asp Leu Lys Met Phe Glu Ala Ile Gly Trp Ile  
 50 55 60  
 Leu Glu Glu Ala Thr Glu Glu Thr Ala Leu His Asn Arg Ile Met  
 65 70 75 80  
 Pro Thr Val Val Arg Pro Pro Lys Gln Leu Leu Pro Glu Ser Thr Pro  
 85 90 95  
 Ala Gly Asn Gln Glu Met Glu Leu Phe Glu Leu Pro Ala Thr Tyr Glu  
 100 105 110  
 Ile Gly Ile Val Arg Gln Phe Pro Phe Ser Ser Ala Leu Gln Arg Met  
 115 120 125  
 Ser Val Val Ala Arg Val Leu Gly Asp Arg Lys Met Asp Ala Tyr Met  
 130 135 140  
 Lys Gly Ala Pro Glu Ala Ile Ala Gly Leu Cys Lys Pro Glu Thr Val  
 145 150 155 160  
 Pro Val Asp Phe Gln Asn Val Leu Glu Asp Phe Thr Lys Gln Gly Phe  
 165 170 175  
 Arg Val Ile Ala Leu Ala His Arg Lys Leu Glu Ser Lys Leu Thr Trp  
 180 185 190  
 His Lys Val Gln Asn Ile Ser Arg Asp Ala Ile Glu Asn Asn Met Asp  
 195 200 205  
 Phe Met Gly Leu Ile Ile Met Gln Asn Lys Leu Lys Gln Glu Thr Pro  
 210 215 220  
 Ala Val Leu Glu Asp Leu His Lys Ala Asn Ile Arg Thr Val Met Val

225		230		235		240
Thr Gly Asp Ser Met	Leu Thr Ala Val	Ser Val Ala Arg Asp Cys Gly				
	245	250		255		
Met Ile Leu Pro Gln	Asp Lys Val Ile Ile	Ala Glu Ala Leu Pro Pro				
	260	265		270		
Lys Asp Gly Lys Val	Ala Lys Ile Asn Trp His Tyr	Ala Asp Ser Leu				
	275	280		285		
Thr Gln Cys Ser His	Pro Ser Ala Ile Asp	Pro Glu Ala Ile Pro Val				
	290	295		300		
Lys Leu Val His Asp	Ser Leu Glu Asp Leu	Gln Met Thr Arg Tyr His				
305	310	315		320		
Phe Ala Met Asn Gly	Lys Ser Phe Ser Val	Ile Leu Glu His Phe Gln				
	325	330		335		
Asp Leu Val Pro Lys	Leu Met Leu His Gly	Thr Val Phe Ala Arg Met				
	340	345		350		
Ala Pro Asp Gln Lys	Thr Gln Leu Ile Glu	Ala Leu Gln Asn Val Asp				
	355	360		365		
Tyr Phe Val Gly Met	Cys Gly Asp Gly Ala	Asn Asp Cys Gly Ala Leu				
	370	375		380		
Lys Arg Ala His Gly	Gly Ile Ser Leu Ser	Glu Leu Glu Ala Ser Val				
385	390	395		400		
Ala Ser Pro Phe Thr	Ser Lys Thr Pro Ser	Ile Ser Cys Val Pro Asn				
	405	410		415		
Leu Ile Arg Glu Gly	Arg Ala Ala Leu Ile	Thr Ser Phe Cys Val Phe				
	420	425		430		
Lys Phe Met Ala Leu	Tyr Ser Ile Ile Gln	Tyr Phe Ser Val Thr Leu				
	435	440		445		
Leu Tyr Ser Ile Leu	Ser Asn Leu Gly Asp	Phe Gln Phe Leu Phe Ile				
	450	455		460		
Asp Leu Ala Ile Ile	Leu Val Val Val Phe	Thr Met Ser Leu Asn Pro				
465	470	475		480		
Ala Trp Lys Glu Leu	Val Ala Gln Arg Pro	Pro Ser Gly Leu Ile Ser				
	485	490		495		
Gly Ala Leu Leu Phe	Ser Val Leu Ser Gln	Ile Ile Ile Cys Ile Gly				
	500	505		510		
Phe Gln Ser Leu Gly	Phe Phe Trp Val	Lys Gln Gln Pro Trp Tyr Glu				
	515	520		525		
Val Trp His Pro Lys	Ser Asp Ala Cys Asn	Thr Thr Gly Ser Gly Phe				
	530	535		540		
Trp Asn Ser Ser His	Val Asp Asn Glu Thr	Glu Leu Asp Glu His Asn				
545	550	555		560		
Ile Gln Asn Tyr Glu	Asn Thr Thr Val Phe	Phe Ile Ser Ser Phe Gln				
	565	570		575		
Tyr Leu Ile Val Ala	Ile Ala Phe Ser Lys	Gly Lys Pro Phe Arg Gln				
	580	585		590		
Pro Cys Tyr Lys Asn	Tyr Phe Phe Val Phe	Ser Val Ile Phe Leu Tyr				
	595	600		605		
Ile Phe Ile Leu Phe	Ile Met Leu Tyr Pro	Val Ala Ser Val Asp Gln				
	610	615		620		
Val Leu Gln Ile Val	Cys Val Pro Tyr Gln	Trp Arg Val Thr Met Leu				
625	630	635		640		
Ile Ile Val Leu Val	Asn Ala Phe Val Ser	Ile Thr Val Glu Asn Phe				
	645	650		655		
Phe Leu Asp Met Val	Leu Trp Lys Val Val	Phe Asn Arg Asp Lys Gln				



cagcatggca cccatgccga gaggagacac aaaaaactgc ctctgacagc tcttgctcaa  
 120  
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg  
 180  
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 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag  
 300  
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 360  
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 420  
 aaggaagggg tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttcgagca  
 480  
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 525

<210> 1524  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<400> 1524  
 Xaa Arg Val Arg Ser Ile Cys Arg His Ser His Lys Arg Leu Val Ala  
 1 5 10 15  
 Cys Phe Gln Gly Gln His Gly Thr Asp Ala Glu Arg Arg His Lys Lys  
 20 25 30  
 Leu Pro Leu Thr Ala Leu Ala Gln Asn Met Gln Glu Ala Ser Thr Gln  
 35 40 45  
 Leu Glu Asp Ser Leu Leu Gly Lys Met Leu Glu Thr Cys Gly Asp Ala  
 50 55 60  
 Glu Asn Gln Leu Ala Leu Glu Leu Ser Gln His Glu Val Phe Val Glu  
 65 70 75 80  
 Lys Glu Ile Val Asp Pro Leu Tyr Gly Ile Ala Glu Val Glu Ile Pro  
 85 90 95  
 Asn Ile Gln Lys Gln Arg Lys Gln Leu Ala Arg Leu Val Leu Asp Trp  
 100 105 110  
 Asp Ser Val Arg Ala Arg Trp Asn Gln Ala His Lys Ser Ser Gly Thr  
 115 120 125  
 Asn Phe Gln Gly Leu Pro Ser Lys Ile Asp Thr Leu Lys Glu Gly Met  
 130 135 140  
 Asp Glu Ala Gly Asn Lys Val Glu Gln Cys Lys Asp Gln Leu Ala Ala  
 145 150 155 160  
 Asp Met Tyr Asn Phe Met Ala Lys Glu Gly Glu Tyr Gly Lys Phe  
 165 170 175

<210> 1525  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1525  
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 60

tgggtccggcc tgctcgtgga ctatacctcg cagcacggcg tcgacgtttt ggtcaagggg  
 120  
 ctgcgttctt ccctggacta tgaatatgaa ctgccgatgg cccagatgaa ccggcggttta  
 180  
 tctggcatcg atacgggtctt tttgcttacc gatgaaaagt acggctacat cagctcatcg  
 240  
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 294

<210> 1526  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1526  
 Val His Glu Arg Met Asp Leu Ile Arg Gln Ser Val Asp Ala Arg Ile  
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 Asn Val Asp Tyr Trp Ser Gly Leu Leu Val Asp Tyr Thr Ser Gln His  
 20 25 30  
 Gly Val Asp Val Leu Val Lys Gly Leu Arg Ser Ser Leu Asp Tyr Glu  
 35 40 45  
 Tyr Glu Leu Pro Met Ala Gln Met Asn Arg Arg Leu Ser Gly Ile Asp  
 50 55 60  
 Thr Val Phe Leu Leu Thr Asp Glu Lys Tyr Gly Tyr Ile Ser Ser Ser  
 65 70 75 80  
 Leu Cys Lys Gln Val Ala Gln Phe Gly Gly Glu Val Thr Gly Met Leu  
 85 90 95  
 Arg Ile

<210> 1527  
 <211> 371  
 <212> DNA  
 <213> Homo sapiens

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 120  
 acttcgccct ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgcg  
 180  
 aagacattga cgcgctgggt tacgacggtg tgttcgaggc cggcatgacc atctgtgtgg  
 240  
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 371

<210> 1528  
 <211> 109  
 <212> PRT

<213> Homo sapiens

<400> 1528

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Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
      20             25             30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
      35             40             45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
      50             55             60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65             70             75             80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
      85             90             95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
      100             105

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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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120
gctcagggct cgacctcgtt gggacttgct ctctgtccgg ctcagggctc gccctcgtg
180
ggacttgctc tctgtccggc tcagggctcg cctccgtggg gacttgctct ctgtccggct
240
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300
tttgctctct gtctggctca ggctgcgcag ggcaatggag gaacctcccg agcaggccca
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609

```

<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

```

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20	25	30	
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser			
35	40	45	
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val			
50	55	60	
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala			
65	70	75	80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu			
85	90	95	
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala			
100	105	110	
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu			
115	120	125	

&lt;210&gt; 1531

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1531

```

accggtcgcc ggcttgtcga gggtaacctt ctggccacag ttggtgatgg tgataggtcc
60
agcgttggac tgggacgccg acgctgaaaa agaagctgac gagtccttgg gggcgcccgc
120
acattcggca agcatgagga cggggagcat cgagaccgcg acagctcggc gaaggaattt
180
cggggtggca ggcatggcga aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctcg tcaggtggtc ttccgggctcg acttcgtctc cgttcccggc accttcccag
300
tgcgcatggc caggtgggttc aagtcggggc ggatcagtca taccgctgcg ctcagctccg
360
gcttttcacc ggattccagc gctgggtgtg tcaccagcaa cctgacgcga ggatttttagc
420
accccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
480
tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgatccctt catacgcgag ccgccgatat gggccccgag tgaggccccct cagttcgcgc
600
tgacgcatgc cgctctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
660
cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctggct caccgcgtcg
720
cgagag
726

```

&lt;210&gt; 1532

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 1532

```

Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
 1           5           10           15
Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
          20           25           30
Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
          35           40           45
Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
          50           55           60
Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
65           70           75           80
Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
          85           90           95
Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
          100          105          110
Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
          115          120          125
His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
          130          135          140
Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
          145          150          155          160
Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
          165          170          175
Pro Glu

```

&lt;210&gt; 1533

&lt;211&gt; 364

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1533

```

natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg
60
gagattattc acagcgaacg ggcgaccggc ggtgcgccgc ttaacgtcct gctgacgctg
120
gttaaaatgc acgtcggctt gccgttgacg gcggtcggtc ttatcggcga agacagcgat
180
ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc
240
accacgtttg cccccacgtc gatgtcgcag gtgatgaccg atcccactgg gcagcgcacc
300
tttttccatt cgcctgccgc caatcgctg ctcgatctcc ccgcctttga tcgactcgac
360
gcgt
364

```

&lt;210&gt; 1534

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1534

```

Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

```

      1             5             10             15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20             25             30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35             40             45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50             55             60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
      65             70             75             80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85             90             95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100             105             110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115             120

```

<210> 1535  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1535
gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaattccgc
60
caatccctgg ggcccgcggt gcgtgccggc cagcggccag tcctggccccg gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accggggccta tcgccgcggc ccatggctgc
180
aaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgctgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccggt
360
actggccac
369

```

<210> 1536  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1536
Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
  1             5             10             15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
      20             25             30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
      35             40             45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
      50             55             60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
      65             70             75             80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```

				85						90					95
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe	
			100					105					110		

<210> 1537  
 <211> 294  
 <212> DNA  
 <213> Homo sapiens

<400> 1537  
 ccactcgagg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt  
 60  
 ctggtgggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttgtt  
 120  
 cctcacgcgc cccggggaga tgggtgggcca gctggccgtg ctcaccgagg agacctcgtc  
 180  
 ggcgtggtgg agacactgac ccaccaggcc cgggacgacca cgggtgcatgc cgttcgggac  
 240  
 tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgcag gtac  
 294

<210> 1538  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1538  
 Pro Leu Ala Ala Pro Pro Glu Pro Ser Arg Val Ser Gly Arg Gln His  
 1 5 10 15  
 Pro Val Arg Val Leu Gly Ala Ala Ala Arg Val Pro Ala Glu Asp Arg  
 20 25 30  
 Gln Pro Gly Gly His Leu Leu Val Pro His Ala Pro Arg Gly Asp Gly  
 35 40 45  
 Gly Pro Ala Gly Arg Ala His Arg Gly Asp Leu Val Gly Val Val Glu  
 50 55 60  
 Thr Leu Thr His Gln Ala Arg Ala Thr Thr Val His Ala Val Arg Asp  
 65 70 75 80  
 Ser Glu Leu Ala Lys Leu Pro Ala Gly Ala Leu Thr Ser Ile Lys Arg  
 85 90 95  
 Arg Tyr

<210> 1539  
 <211> 1015  
 <212> DNA  
 <213> Homo sapiens

<400> 1539  
 acgcgttcgg gcgtcaggca cacgcatctc aacagatgtg gctgacaccc aaggcagtcg  
 60  
 gcctcagtgc cctgtcaccc acctagaacc tgttcacagc atgtcatccg ggctgctctg  
 120  
 gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa  
 180

caggctgctc agccagggtc aggagaaggt gggtcaggct ccccggggac ctcaggccct  
 240  
 gacgcacctt ggctcacc ctaggcctct ctgtcggggc agcctggctc agcagagccc  
 300  
 gggacacacg gctgaggcca cccaggtgg gccatcttgc cctgttttg tgccccctac  
 360  
 tcagttctcc ttctgtctg gctcaggtct aggccagtca agaggggtggc tgagaagcag  
 420  
 gaggagcctc agagaccctc ccctcgaaag cactggggct tccacctcac aagcggcagg  
 480  
 ttcgctttgg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg  
 540  
 gttgccgac catcgctccag gcctggccca ggagccggtg aggaacctgg ggctgttggtg  
 600  
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgacaccac  
 660  
 ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca  
 720  
 gcatccccag tctaatgggt gccctgcca ctctctgag ttcccggtgca gagctcccc  
 780  
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat  
 840  
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag  
 900  
 cagccccgat gacatgctat gaacaggttt taggtgggtg acagggcact gaggccgact  
 960  
 gccttgggtg tcagccacat ctgttgagat gcgtgtgcct gacgcccga cgcgt  
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5				10						15	
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
			20					25					30		
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
		35					40					45			
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
	50					55					60				
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65					70					75				80	
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							
					85										

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaaag ggaagcttag  
60  
cccgcgctg ccgcctccga gcagcccgc aggactctgg ctactggaga tgggcgcccc  
120  
gctatcgcg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcccccgga  
180  
gctgctggtg cagggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc  
240  
cagtgtgccg cgcttgccgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg  
300  
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgcctgccc  
360  
acaacgaaga caaagaggag ttcccgtgt gcgcctggc gcgctactga ctgcgcgcgc  
420  
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg  
480  
tgagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc  
540  
cttcgcagac ctgcttcgtg acctctttcg aatgggtgctc caagaggcag cttgtggacc  
600  
tggtgatgga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg  
660  
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc  
720  
tgatgtgta tgaaaaggaa gtggtcaagt tctcagcctc acctgaccgc gtccttcagt  
780  
ggactgagag gggctgccga caggctctcc acgtcttcac caactttggc aagggcatcc  
840  
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg  
900  
cccttgtgac ccactccagt gtgagggcca ggatccgtct gtcctagcga ctggactact  
960  
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg  
1020  
atcctccac tttggccttc caaatgttg cgattatagg cgtgagccac tgtggctggc  
1080  
ctgaaatccc ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt  
1140  
caagctaacc aggcgtccgc tacttcagaa gagtgactg tcgcatgggg agtctgtaac  
1200  
catgcttttc acttccactg catctctcgc tggctcaaaa cagcagaggt gtgtccattg  
1260  
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag  
1320  
cttaattgtt ttgttattca ttaaatgact ttccctgctg ttacctaatt acaaattgga  
1380  
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta  
1440  
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa  
1482

&lt;210&gt; 1542

&lt;211&gt; 57

&lt;212&gt; PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1           5           10           15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20           25           30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35           40           45
Glu Trp Glu Phe Gln Lys Tyr Gly His
          50           55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtagcggaag ttggatgctg acgttgccctc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggccccc
300
cncnccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1           5           10           15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20           25           30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35           40           45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50           55           60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
65           70           75           80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85           90           95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1545

ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt  
60  
caacagtagt tggcgaatcc ttcgatgggc aagtcctgtg agcttgctca tctgacggat  
120  
cgtctctgtc tcaagcacct cgctgtttc caggttcaag gcctggatag tgcgagtgtc  
180  
gtactggtcg atcacttcca ccgagtgggc tgggtagccc cttgccattc gctttatgat  
240  
ctcaaccata gatgcatttg gcatgttcca gagcttgtag tccttaacga tctctctggc  
300  
gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga  
360  
ac  
362

&lt;210&gt; 1546

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1546

Met	Val	Lys	Ser	Cys	Glu	Leu	Ala	His	Leu	Thr	Asp	Arg	Leu	Cys	Leu
1				5					10					15	
Lys	His	Leu	Ala	Cys	Phe	Gln	Val	Gln	Gly	Leu	Asp	Ser	Ala	Ser	Val
			20					25					30		
Val	Leu	Val	Asp	His	Phe	His	Arg	Val	Val	Trp	Val	Ala	Pro	Cys	His
		35					40					45			
Ser	Leu	Tyr	Asp	Leu	Asn	His	Arg	Cys	Ile	Trp	His	Val	Pro	Glu	Leu
	50					55					60				
Val	Leu	Leu	Asn	Asp	Leu	Ser	Gly	Val	Val	Glu	Asn	Leu	His	Ala	Ile
65					70					75				80	
Val	Arg	Met	Gly	His	Cys	Gly	Asp	Val	Pro	Ser	Arg				
				85					90						

&lt;210&gt; 1547

&lt;211&gt; 429

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1547

cgcggttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgctt  
60  
ctgccgcggt cggtgtggtt cagcgccgtg tcggcggtga acctggagcg cgagcgctg  
120  
cgcaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac  
180  
agcgtggtgt tgtggggggg gatgattgtc tggttgggcg cggcggtgat tccgttcctg  
240  
atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac  
300  
gggcttaaac gccagaagtt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg  
360

tggaacagca accggattgt caccaatata tttctgttcc aacttcagcg gcattccgac  
 420  
 caccatgcc  
 429

<210> 1548  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 1548  
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser  
 1 5 10 15  
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala  
 20 25 30  
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp  
 35 40 45  
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu  
 50 55 60  
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu  
 65 70 75 80  
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr  
 85 90 95  
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr  
 100 105 110  
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr  
 115 120 125  
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala  
 130 135 140

<210> 1549  
 <211> 443  
 <212> DNA  
 <213> Homo sapiens

<400> 1549  
 gtcgacaggc tccaggggtc tgtttttag tagcaccgct gtggtgcaac atgcgtctgg  
 60  
 gcacaccagc gtcgcccgtt tcctgttgta gtctttcctc tctgactcca ggggtattgg  
 120  
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc  
 180  
 agaatccctg cactccacca ttcttgggca aactccctc taggattttg gtctcccttt  
 240  
 tctctctggt ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt  
 300  
 ggtttcttcc actccccag ctgcgcgtg ggaggcgcca ctgcaaactt ccctggggtc  
 360  
 tccagctgc tcagagatcc ccattgccctt ccctgatcag ctccctgccc ggttctcatt  
 420  
 ccgacgcggc tgcattgata ttc  
 443

<210> 1550



<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1550  
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu  
   1                  5                  10                  15  
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg  
           20                  25                  30  
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly  
           35                  40                  45  
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln  
       50                  55                  60  
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu  
 65                  70                  75                  80  
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala  
           85                  90                  95  
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr  
           100                  105                  110  
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg  
           115                  120                  125  
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser  
       130                  135

<210> 1551  
 <211> 306  
 <212> DNA  
 <213> Homo sapiens

<400> 1551  
 ccatggatac cccacctctg gcaactcaaca tgacttggct gccacacacc aggaaacctc  
 60  
 agaggagcag ccagctggcc aagcaccctt gcccttgccc tgcgggctcc acaaaagctg  
 120  
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct  
 180  
 ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca  
 240  
 gtccttctct ccatttggtc ctaacacagc ctccccagga gaccaggggc atcccnnnnc  
 300  
 cccnnc  
 306

<210> 1552  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 1552  
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr  
   1                  5                  10                  15  
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys  
           20                  25                  30  
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

      35              40              45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
  50              55              60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
  65              70              75              80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
      85              90              95
Ile Pro Xaa Pro Xaa
      100

```

<210> 1553  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1553
atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcggggccac
  60
acgtactca tcctggggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
 120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
 180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cgggggtctcc
 240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccatgctg
 300
attgcccgtt ttggccatgg ctcagctgag ctggagaact gcctctatgt ggtgggggga
 360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
 420
aaatacgacc ctgggggcaa caagtggatg atggtggccc ccttgcgagg tggcgtcagc
 480
aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
 540
cgggacatgg tgtccaaggt ccagtgctat gacccctcgg agaacagggt gacgatcaag
 600
gccgagtgcc cccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
 657

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<210> 1554  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

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<400> 1554
Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
  1              5              10              15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
      20              25              30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
      35              40              45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
      50              55              60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

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65					70					75					80
Lys	Asp	Val	Trp	Val	Tyr	Asp	Thr	Val	His	Glu	Glu	Trp	Ser	Lys	Ala
				85					90					95	
Ala	Pro	Met	Leu	Ile	Ala	Arg	Phe	Gly	His	Gly	Ser	Ala	Glu	Leu	Glu
			100					105					110		
Asn	Cys	Leu	Tyr	Val	Val	Gly	Gly	His	Thr	Ser	Leu	Ala	Gly	Val	Phe
		115					120					125			
Pro	Ala	Ser	Pro	Ser	Val	Ser	Leu	Lys	Gln	Val	Glu	Lys	Tyr	Asp	Pro
	130					135					140				
Gly	Ala	Asn	Lys	Trp	Met	Met	Val	Ala	Pro	Leu	Arg	Asp	Gly	Val	Ser
145					150					155				160	
Asn	Ala	Ala	Val	Val	Ser	Ala	Lys	Leu	Lys	Leu	Phe	Val	Phe	Gly	Gly
			165					170					175		
Thr	Ser	Ile	His	Arg	Asp	Met	Val	Ser	Lys	Val	Gln	Cys	Tyr	Asp	Pro
			180					185					190		
Ser	Glu	Asn	Arg	Trp	Thr	Ile	Lys	Ala	Glu	Cys	Pro	Gln	Pro	Trp	Arg
	195						200					205			
Tyr	Thr	Ala	Ala	Ala	Val	Leu	Gly	Ser	Gln	Ile					
	210					215									

&lt;210&gt; 1555

&lt;211&gt; 328

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1555

acgcgtggga gctcgggaga gaggactctg cttctgggggt ttgaagggtga gcgtgattct  
60  
ggaggagcct gccttgccgc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc  
120  
tgtaagggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag  
180  
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg  
240  
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt  
300  
gtagcatcct gtgttgggat tgggattn  
328

&lt;210&gt; 1556

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1556

Met	Leu	His	Ser	Ala	Ile	Ala	Ser	Val	Ser	His	Ala	His	Lys	Phe	Ala
1				5					10				15		
His	Leu	His	Ser	Thr	His	Thr	His	Ile	Ser	Arg	Ser	Thr	Ala	Leu	Ser
			20					25				30			
Leu	Ser	Phe	Lys	Ser	Gln	Thr	Gly	Gly	Ser	Pro	Pro	Arg	Pro	Thr	Leu
		35					40					45			
Ala	Asp	Phe	Gln	Thr	Ser	Arg	Gly	Thr	Leu	Asp	His	Pro	Tyr	Arg	Ile
	50					55					60				
Thr	His	Val	Leu	His	Pro	Leu	His	Asn	Thr	Arg	Ser	Pro	Gln	Gly	Arg

65                                      70                                      75                                      80  
 Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser  
    85                                      90                                      95  
 Leu Pro Ser Ser His Ala  
    100

<210> 1557  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 1557  
 gtgcacagac ttttcgagcg ggccattaag tgggtttacgt ctgggatcgg ctccgctttc  
 60  
 tcgcattttt cggatcaggt caaattctgt gctcggcatt gacaggaaat tgacgtgtat  
 120  
 cagtcgattc tttgcagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac  
 180  
 gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg  
 240  
 ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccggaagc  
 300  
 gaagctcgat gggcagcagg cgcattgagga acccggcgcc attgaatcgt gaggcgctgg  
 360  
 cggagcgcgg cccgttcaaa tgcgacgcgt  
 390

<210> 1558  
 <211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1558  
 Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser  
 1                                      5                                      10                                      15  
 Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln  
    20                                      25                                      30  
 Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser  
    35                                      40                                      45  
 Thr Trp Cys Gly Met Val Val Val Val Leu Leu Ser Ala Tyr Ser Ala  
    50                                      55                                      60  
 Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu  
 65                                      70                                      75                                      80  
 Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser  
    85                                      90                                      95  
 Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser  
    100                                      105                                      110  
 Val His

<210> 1559  
 <211> 556  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1559

accggtggcg acggtatcgg tggcgcgctg atccttgccct cggaatcctt cgctgcagag  
 60  
 ggtgagtcga agcgacccag cgtccagggtg ggcgacccgt tcatggagaa gctgctcatc  
 120  
 gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgcagga ttctgggtgcc  
 180  
 gccggaatct cctgtgccac ctccgagctg gccagtgtgt gcgacgggtg catgcacgtc  
 240  
 gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc  
 300  
 gagtcccagg agcggatggc cgcggtggtg cgccccgatc agcttgaccg cttcatggag  
 360  
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga  
 420  
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac  
 480  
 gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag  
 540  
 aacgacgcta acgcgt  
 556

&lt;210&gt; 1560

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25				30			
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55				60					
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65				70					75					80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85					90						95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
		100						105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
	115					120						125			
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135					140				
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145				150					155					160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165					170						175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
		180					185								

<210> 1561  
 <211> 466  
 <212> DNA  
 <213> Homo sapiens

<400> 1561  
 acgcgtgaaa ggtttgagag aagagagatg ccgctattga atctgctgga gttttacatc  
 60  
 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt  
 120  
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg  
 180  
 tgcggaatgg agaccattt tgtcattgat tcatctgacc gataaggcca tagtgcagtt  
 240  
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttggaagg aactaccagg  
 300  
 cgttgcttta aattcccaat gtgttgtttc gttactacta atttaatacc gtaagctcta  
 360  
 ggtaaagttc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcaccc  
 420  
 tcctcctgtg gcttttaggtc tgacattgta tttgaccttt actagt  
 466

<210> 1562  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1562  
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro  
 1 5 10 15  
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr  
 20 25 30  
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln  
 35 40 45  
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala  
 50 55 60  
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser  
 65 70 75 80  
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser  
 85 90 95  
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu  
 100 105 110  
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu  
 115 120 125  
 Gly Met  
 130

<210> 1563  
 <211> 434  
 <212> DNA  
 <213> Homo sapiens

<400> 1563

ctgggggggtg tggtcggcct gctgtcgggtg tacttgccgc gttggctgca tgaaacaccg  
60  
atcttcgctg agatgcagca gcgcaaaacc ctgggtgccg agttgccatt gcgcgcggta  
120  
ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg  
180  
gggtgtggtt tggtcatcct gatgaccccg accgtgctgc aaaccgtcta ccacttcage  
240  
ccgacggttg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt  
300  
gcgtccggcg cgctggctga cggttttggt gccggtcgcg ttttggtcac cggttggcgt  
360  
tgctgctggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatggttga  
420  
ataagtgtac gcgt  
434

<210> 1564  
<211> 132  
<212> PRT  
<213> Homo sapiens

<400> 1564  
Leu Gly Gly Val Phe Gly Leu Leu Ser Val Tyr Leu Pro Arg Trp Leu  
1 5 10 15  
His Glu Thr Pro Ile Phe Ala Glu Met Gln Gln Arg Lys Thr Leu Ala  
20 25 30  
Ala Glu Leu Pro Leu Arg Ala Val Leu Arg Asp His Arg Gly Ala Ile  
35 40 45  
Val Leu Ser Met Leu Leu Thr Trp Leu Leu Ser Ala Gly Val Val Val  
50 55 60  
Val Ile Leu Met Thr Pro Thr Val Leu Gln Thr Val Tyr His Phe Ser  
65 70 75 80  
Pro Thr Val Ala Leu Gln Ala Asn Ser Leu Ala Ile Val Thr Leu Ser  
85 90 95  
Leu Gly Cys Ile Ala Ser Gly Ala Leu Ala Asp Arg Phe Gly Ala Gly  
100 105 110  
Arg Val Leu Val Thr Gly Trp Arg Cys Cys Trp Pro Leu Pro Gly Arg  
115 120 125  
Cys Ile Thr Ala  
130

<210> 1565  
<211> 373  
<212> DNA  
<213> Homo sapiens

<400> 1565  
ccatggctcgt agcccttgggt tcaacaagag ccgtctactg acgctaacc accatgagcc  
60  
agagggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc  
120  
ctgcattcgg ccatttcttc ccaagaatca ccataaagggt tgtcaaaatc aaggaccctg  
180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt tccccccgag ggagaaaagc  
 240  
 ggggtgggtgct cttgatgctc gacaacctct accgtcccag taccacacct gcattggcga  
 300  
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg  
 360  
 acaacacggg tac  
 373

<210> 1566

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1566

Met	Ser	Gln	Arg	Val	Ser	Gly	Ser	Gly	Thr	Tyr	Trp	Thr	Met	Lys	Ala
1				5					10					15	
Ile	Lys	Arg	Thr	Arg	Glu	Pro	Ala	Phe	Gly	His	Phe	Phe	Pro	Arg	Ile
			20					25					30		
Thr	Ile	Lys	Val	Val	Lys	Ile	Lys	Asp	Pro	Asp	Pro	Val	Ile	Leu	Glu
		35					40					45			
Val	Ile	Asp	Glu	Gln	Asn	Lys	Phe	Thr	Pro	Glu	Gly	Glu	Lys	Arg	Val
		50				55					60				
Val	Leu	Leu	Met	Leu	Asp	Asn	Leu	Tyr	Arg	Pro	Ser	Thr	His	Arg	Ala
65					70				75					80	
Leu	Ala	Asn	Gly	Gly	Val	Pro	Tyr	Leu	Arg	Ser	Lys	Ser	Val	Thr	Val
			85					90						95	
Asp	Leu	Val	Asp	Ser	Arg	Asp	Asn	Thr	Gly						
			100					105							

<210> 1567

<211> 917

<212> DNA

<213> Homo sapiens

<400> 1567

agcttttttcg accgctgaag gagtgggata cccgctcccc agacactccc tttctagggg  
 60  
 aagccgctgc actcctgggg gaccagttt gatgcctcca ggaggataag tctgaagccg  
 120  
 ggttgggaag ggagcggaga ggcccaaaca gagcagcagg cagcgccctc tgctggcacc  
 180  
 ctggagacag cttcggctgc gggggccctg ccttctagtc ctccccagct ttcaggacac  
 240  
 cttgacaacc tgggggtccct gcagaagtgg cccggctgtc ccccaagtct cctgaagcta  
 300  
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt  
 360  
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca  
 420  
 tgaggcttcg tgttctagaa ggtgggtgggt tagtgccgca ctgagggcgt gtccgggagg  
 480  
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc  
 540



attcgtgccca cagcgggggac ctccggagcta tgccttgata aggcaagtga gggttacatgt  
 600  
 acgatgatgc gggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc  
 660  
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag  
 720  
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat  
 780  
 gacagcagta cgaatcgtgg ctctcctgag gcctggggtt cctcatatgt aaaatggggg  
 840  
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag  
 900  
 ggctgaagag ctgggtc  
 917

<210> 1568  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1568  
 Met Gly Pro Ala Leu Pro His Val Phe Glu Ser Gln His Leu Ser Pro  
 1 5 10 15  
 Leu Leu Cys Ile Cys Gly Ser Gln His Cys Leu Pro Pro Tyr Pro Asp  
 20 25 30  
 Ser Phe Arg Arg Leu Gly Gly Gln Pro Gly His Phe Cys Arg Asp Pro  
 35 40 45  
 Arg Leu Ser Arg Cys Pro Glu Ser Trp Gly Gly Leu Glu Gly Arg Gly  
 50 55 60  
 Pro Ala Ala Glu Ala Val Ser Arg Val Pro Ala Glu Gly Ala Ala Cys  
 65 70 75 80  
 Cys Ser Val Trp Ala Ser Pro Leu Pro Ser Gln Pro Gly Phe Arg Leu  
 85 90 95  
 Ile Leu Leu Glu Ala Ser Asn Trp Val Pro Gln Glu Cys Ser Gly Phe  
 100 105 110  
 Pro

<210> 1569  
 <211> 379  
 <212> DNA  
 <213> Homo sapiens

<400> 1569  
 ggagggcctg tgattctact gcaggcaggc acccccaca acctcacatg ccgggccttc  
 60  
 aatgcgaagc ctgctgccac catcatctgg ttccgggacg ggacgcagca ggagggcgct  
 120  
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt  
 180  
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc  
 240  
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc  
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc  
 360  
 acagccaacc cggagatct  
 379

<210> 1570  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1570  
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr  
 1 5 10 15  
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg  
 20 25 30  
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys  
 35 40 45  
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr  
 50 55 60  
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala  
 65 70 75 80  
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro  
 85 90 95  
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu  
 100 105 110  
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile  
 115 120 125

<210> 1571  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 1571  
 tgcgcacttt tccgctcccc atgggtcccc tggncgttga tcatgccccca gatgttcatc  
 60  
 atcggcatct tcttcttctt gccaaagcggc caagccgtgc tccagtcttt ccagatggaa  
 120  
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttccgcaa cctgctggat  
 180  
 gacccacact acctgaattc cttccagcgc accgccgtgt tctcgggtgct ggtggcaggg  
 240  
 gtcgggatcg ccgtgtcact ggggtctggcg atctttgccg accccatcac tccgtcgcca  
 300  
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg cacccatgat cgccggc  
 357

<210> 1572  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1572.  
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

```

      1           5           10           15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20           25           30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35           40           45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50           55           60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
      65           70           75           80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85           90           95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100          105          110
Val Ala Pro Met Ile Ala Gly
      115

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&lt;210&gt; 1573

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1573

```

gaattcccat tgtcatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
60
tattgtacag attttggaat cggtagagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggt ataacacccg
180
ttggaaagag gatatccgtt accattatgc tgagatcagc tcccaggtgc cccttggcaa
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

```

&lt;210&gt; 1574

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1574

```

Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1           5           10           15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20           25           30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35           40           45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50           55           60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
      65           70           75           80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85           90           95

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<210> 1575  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

<400> 1575  
 nnacgcgtca gagagatctg tgtgtcggga ggggtgcccc tcatcattga tgaccgcgta  
 60  
 catctcggtg ccgaaattgg ggccgatggt gtccatgttg ggcagtctga catgccggtc  
 120  
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc  
 180  
 gcccatgtgg aggccgccct gtcccagggg cgtgacatcg tcgactatct gggagttggg  
 240  
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt  
 300  
 gatgtcgtca acgccagccc gtggccggtg tgcgtcatcg gtggggtgag cgcattccgat  
 360  
 gctcaagacg tagcccgggt gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg  
 420  
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g  
 471

<210> 1576  
 <211> 157  
 <212> PRT  
 <213> Homo sapiens

<400> 1576  
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile  
 1 5 10 15  
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His  
 20 25 30  
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly  
 35 40 45  
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu  
 50 55 60  
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly  
 65 70 75 80  
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu  
 85 90 95  
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val  
 100 105 110  
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly  
 115 120 125  
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro  
 130 135 140  
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr  
 145 150 155

<210> 1577  
 <211> 287  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1577

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 60  
 ccccatcctg cgggcttgcg caccggttgcg ctccaacccg gcgtcgcgca cgcgcgcacc  
 120  
 ttgcgcgttg cgggggcagg cttccccgct cgcggccagc gcgccgcggg cgatctggtg  
 180  
 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag  
 240  
 cagctcgacg tggcgctcgg gaagagcgcg acacgccatt ttccgga  
 287

&lt;210&gt; 1578

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1				5					10					15	
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
			20					25					30		
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35				40					45				
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85					90						95	

&lt;210&gt; 1579

&lt;211&gt; 2829

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1579

nggggcgggg agcggacttc ctcctctgag ggccgtgccg cgctgccaga tttgttcttc  
 60  
 cgccccctgcc tccgcggctc ggaggcgagc ggaagggtgcc ccggggccga ggccccgtgac  
 120  
 ggggcggggc ggagcccccg cagtccgggg tcgccggcga gggccatgtc gctgttgggg  
 180  
 gaccgcgtac aggccctgcc gccctcggcc gccccacgg ggccgctgct cgccccctccg  
 240  
 gccggcgcga ccctcaaccg cctgcgggag ccgctgctgc ggaggctcag cgagctcctg  
 300  
 gatcaggcgc ccgagggccg gggctggagg agactggcgg agctggcggg gagtcgcggg  
 360  
 cgcctccgcc tcagttgcct agacctggag cagtgttctc ttaagggtact ggagcctgaa  
 420  
 ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aagggtgcac agtcacagaa  
 480

ttgagtgatt tcctgcaggc tatggaacac actgaagttc ttcagettct cagcccccca  
540  
ggaataaaga ttactgtaaa ccagagtgca aaggcagtct tggctggaca gtttgtgaaa  
600  
ctgtgttgcc gggcaactgg acatcctttt gttcaatata agtgggtcaa aatgaataaa  
660  
gagattccaa atggaaatac atcagagctt atttttaatg cagtgcattg aaaagatgca  
720  
ggcttttatg tctgtcgagt taataacaat ttcacctttg aattcagcca gtggtcacag  
780  
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840  
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900  
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960  
ccattaacac atgagaccaa aaagctatac atggtgcctt atgcggattt ggaacaccaa  
1020  
ggaacctact ggtgtcatgt atataatgat cgagacagtc aagatagcaa gaaggtagaa  
1080  
atcatcatag gaagaacaga tgaggcagtg gagtgcactg aagatgaatt aaataatctt  
1140  
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1260  
gtgtacgaat tgactaactt actgagacag ctggacttca aagtgggttc actgttggtg  
1320  
cttactgaat atgagatgag taatgctgtg gatgagtttt tactcctttt agacaaggga  
1380  
gtatatgggt tattatatta tgcaggacat gggtatgaaa attttgggaa cagcttcatg  
1440  
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1500  
ctgaaattga tgcaagaaaa agaaactgga cttaattgtg tcttattgga tatgtgtagg  
1560  
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1620  
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1680  
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1740  
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1800  
caggctctag agattcgaag tagtttatct gagaagagag cacttactga tccaatacag  
1860  
ggaacagaat attctgctga atctctgtg cggaatctac agtgggcaa ggctcatgaa  
1920  
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1980  
gctgagtttt ccaatgtcat gatcatctat acaagtatag ttacaaaacc accggagata  
2040  
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2100

gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga tcttcccaag  
 2160  
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 2220  
 gtatgtttat catatcagta ctcaggattg gaagatactg tagaggacaa gcaggaagtg  
 2280  
 aatgttggga aacctctcat tgctaaatta gacatgcacg gaggtttggg aaggaagact  
 2340  
 tgctttcaaa cttgtcttat gtctaattgg ccttaccaga gttctgcagc cacctcagga  
 2400  
 ggagcagggc attatcactc attgcaagac ccattccatg gtgtttacca ttcacatcct  
 2460  
 ggtaatccaa gtaatgttac accagcagat agctgtcatt gcagccggac tccagatgca  
 2520  
 tttatttcaa gtttcgctca ccatgcttca tgtcatttta gtagaagtaa tgtgccagta  
 2580  
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 2640  
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 2700  
 ataaagttag acattgtgaa aaggcaaatt tgtatatgta gagaaagaat agtagtaact  
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 2820  
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 2829

<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20						25				30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
			35				40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
			50			55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70				75					80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
				85					90					95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105					110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
			115				120						125		
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
			130				135					140			
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

165 170 175  
 Phe Asn Ala Val His Val Lys Asp Ala Gly Phe Tyr Val Cys Arg Val  
 180 185 190  
 Asn Asn Asn Phe Thr Phe Glu Phe Ser Gln Trp Ser Gln Leu Asp Val  
 195 200 205  
 Cys Asp Ile Pro Glu Ser Phe Gln Arg Ser Val Asp Gly Val Ser Glu  
 210 215 220  
 Ser Lys Leu Gln Ile Cys Val Glu Pro Thr Ser Gln Lys Leu Met Pro  
 225 230 235 240  
 Gly Ser Thr Leu Val Leu Gln Cys Val Ala Val Gly Ser Pro Ile Pro  
 245 250 255  
 His Tyr Gln Trp Phe Lys Asn Glu Leu Pro Leu Thr His Glu Thr Lys  
 260 265 270  
 Lys Leu Tyr Met Val Pro Tyr Ala Asp Leu Glu His Gln Gly Thr Tyr  
 275 280 285  
 Trp Cys His Val Tyr Asn Asp Arg Asp Ser Gln Asp Ser Lys Lys Val  
 290 295 300  
 Glu Ile Ile Ile Gly Arg Thr Asp Glu Ala Val Glu Cys Thr Glu Asp  
 305 310 315 320  
 Glu Leu Asn Asn Leu Gly His Pro Asp Asn Lys Glu Gln Thr Thr Asp  
 325 330 335  
 Gln Pro Leu Ala Lys Asp Lys Val Ala Leu Leu Ile Gly Asn Met Asn  
 340 345 350  
 Tyr Arg Glu His Pro Lys Leu Lys Ala Pro Leu Val Asp Val Tyr Glu  
 355 360 365  
 Leu Thr Asn Leu Leu Arg Gln Leu Asp Phe Lys Val Val Ser Leu Leu  
 370 375 380  
 Asp Leu Thr Glu Tyr Glu Met Arg Asn Ala Val Asp Glu Phe Leu Leu  
 385 390 395 400  
 Leu Leu Asp Lys Gly Val Tyr Gly Leu Leu Tyr Tyr Ala Gly His Gly  
 405 410 415  
 Tyr Glu Asn Phe Gly Asn Ser Phe Met Val Pro Val Asp Ala Pro Asn  
 420 425 430  
 Pro Tyr Arg Ser Glu Asn Cys Leu Cys Val Gln Asn Ile Leu Lys Leu  
 435 440 445  
 Met Gln Glu Lys Glu Thr Gly Leu Asn Val Phe Leu Leu Asp Met Cys  
 450 455 460  
 Arg Lys Arg Asn Asp Tyr Asp Asp Thr Ile Pro Ile Leu Asp Ala Leu  
 465 470 475 480  
 Lys Val Thr Ala Asn Ile Val Phe Gly Tyr Ala Thr Cys Gln Gly Ala  
 485 490 495  
 Glu Ala Phe Glu Ile Gln His Ser Gly Leu Ala Asn Gly Ile Phe Met  
 500 505 510  
 Lys Phe Leu Lys Asp Arg Leu Leu Glu Asp Lys Lys Ile Thr Val Leu  
 515 520 525  
 Leu Asp Glu Val Ala Glu Asp Met Gly Lys Cys His Leu Thr Lys Gly  
 530 535 540  
 Lys Gln Ala Leu Glu Ile Arg Ser Ser Leu Ser Glu Lys Arg Ala Leu  
 545 550 555 560  
 Thr Asp Pro Ile Gln Gly Thr Glu Tyr Ser Ala Glu Ser Leu Val Arg  
 565 570 575  
 Asn Leu Gln Trp Ala Lys Ala His Glu Leu Pro Glu Ser Met Cys Leu  
 580 585 590  
 Lys Phe Asp Cys Gly Val Gln Ile Gln Leu Gly Phe Ala Ala Glu Phe



595	600	605
Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu		
610	615	620
Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp		
625	630	635
Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser		
	645	650
Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu		
	660	665
Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu		
	675	680
Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu		
	690	695
Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly		
705	710	715
Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro		
	725	730
Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser		
	740	745
Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro		
	755	760
Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp		
	770	775
Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg		
785	790	795
Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser		
	805	810
Asp Arg Leu Arg Ile Ser Glu Lys		
	820	

&lt;210&gt; 1581

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1581

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60

cggtgtgccc aggtggctga cgcttggtc gattcgggct cgatgccctt cgcccagtgg  
120

ggatacccg atgtgcccgg ttcgaaggag aagttcgagt ccactaccc ggggtgacttc  
180

atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc  
240

ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag  
300

gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gctcatggat  
360

tcccacggtg ccgacgcgt gcgttggttc atggcgccg acggctcccc atggagtga  
420

cgacgc

426

&lt;210&gt; 1582

<211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1582

Asp	Pro	His	Arg	Pro	Phe	Ile	Asp	Glu	Val	Thr	Phe	Thr	Arg	Glu	Gly
1				5				10						15	
His	Thr	Tyr	His	Arg	Val	Pro	Glu	Val	Ala	Asp	Ala	Trp	Leu	Asp	Ser
		20					25						30		
Gly	Ser	Met	Pro	Phe	Ala	Gln	Trp	Gly	Tyr	Pro	His	Val	Pro	Gly	Ser
	35					40						45			
Lys	Glu	Lys	Phe	Glu	Ser	His	Tyr	Pro	Gly	Asp	Phe	Ile	Cys	Glu	Ala
	50				55					60					
Ile	Asp	Gln	Thr	Arg	Gly	Trp	Phe	Tyr	Thr	Met	Met	Ala	Val	Gly	Thr
65				70				75						80	
Leu	Val	Phe	Asp	Glu	Ser	Ser	Tyr	Arg	Asn	Val	Leu	Cys	Leu	Gly	His
			85					90						95	
Ile	Leu	Ala	Glu	Asp	Gly	Arg	Lys	Met	Ser	Lys	His	Leu	Gly	Asn	Ile
		100					105						110		
Leu	Leu	Pro	Ile	Pro	Leu	Met	Asp	Ser	His	Gly	Ala	Asp	Ala	Leu	Arg
		115				120						125			
Trp	Phe	Met	Ala	Ala	Asp	Gly	Ser	Pro	Trp	Ser	Ala	Arg	Arg		
	130					135						140			

<210> 1583  
 <211> 450  
 <212> DNA  
 <213> Homo sapiens

<400> 1583

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nnacgcgtga agggttatgg agatgggttca gggagtaagg aaggtttcag ggatgggttta
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gggggttctg aggaaatggg gtcaatggat gaggcagggt ataggaagga tttgggggct
120
cctaagggaa taggttcagg gagtaaggca ggtttcaggg atggtttagg gagttctggg
180
gaaatgggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
240
ggttcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca
300
ggggatgagg caggttataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
360
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420
ggttctaggc aaggctttgg gggaactagt
450

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<210> 1584  
 <211> 150  
 <212> PRT  
 <213> Homo sapiens

<400> 1584

Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

1	5	10	15
Arg Asp Gly Leu Gly Gly Ser Glu Glu Met Gly Ser Met Asp Glu Ala			
	20	25	30
Gly Tyr Arg Lys Asp Leu Gly Ala Pro Lys Gly Ile Gly Ser Gly Ser			
	35	40	45
Lys Ala Gly Phe Arg Asp Gly Leu Gly Ser Ser Gly Glu Met Gly Ser			
	50	55	60
Met Asp Glu Ala Asp Tyr Arg Lys Asp Leu Gly Ala Pro Glu Glu Met			
65	70	75	80
Gly Ser Gly Ser Tyr Thr Asp Tyr Arg Asn Gly Leu Gly Ser Ser Gly			
	85	90	95
Lys Ile Ser Ser Gly Asp Glu Ala Gly Tyr Lys Asn Val Leu Gly Gly			
	100	105	110
Ser Gly Arg Asn Pro Leu Gly Ser Glu Ala Gly Ser Arg Gly Ser Leu			
	115	120	125
Glu Asp Ser Gly Tyr Ile Leu Ser Trp Asn Glu Ala Gly Ser Arg Gln			
	130	135	140
Gly Phe Gly Gly Thr Ser			
145	150		

<210> 1585  
 <211> 596  
 <212> DNA  
 <213> Homo sapiens

<400> 1585  
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 tctaattccga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt  
 120  
 ggcagctgca gggcaagctg gggaggaagc gcagggtgtt gcacaggttg catcataatg  
 180  
 gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaacactgg  
 240  
 tttagaaata cgctttttta ggaacgacag agaaataaag attcaccata caacttcagt  
 300  
 aaccctccta taacggtttt agaagatata agaattgatc cacagcccac ctcttttagaa  
 360  
 cattacaaat ctgatgcata attcagtaaa aggtcttcta gaacgagatt tactgactac  
 420  
 cagcttaggg ttctgcaaga ctttttttgac acaaacgctt acccaaaaga tgatgaaata  
 480  
 gaacaactct ccaactgttct caatctgcct acccggtta ttgttgatg gttccagaat  
 540  
 gtcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt  
 596

<210> 1586  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1586  
 Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

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      1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100          105          110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115          120          125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130          135

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<210> 1587  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens

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<400> 1587
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attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggcttcttag
120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tggtcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcggtgctcc tgacagctca gacccagac cgaggtgct cccgacagct cagacccag
300
accgcgggtg ctctgacag ctacagaccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcggtgctcc cgacagctca
420
gacccagac cgcggtgct cctgacagct cagacccag accgcgggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

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<210> 1588  
 <211> 86  
 <212> PRT  
 <213> Homo sapiens

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<400> 1588
Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
20          25          30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

      35              40              45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
      50              55              60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65              70              75              80
Pro Asp Arg Gly Cys Ser
      85

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<210> 1589  
 <211> 407  
 <212> DNA  
 <213> Homo sapiens

<400> 1589  
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 60  
 tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc  
 120  
 tgcctactcg ttgctgacca ccaagagggc gggcgtggac gggtcacgcg cagttggcag  
 180  
 gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgcag  
 240  
 gactggggct ggctgtcgat ggttgcgggg ctcgctgttg tcaaggatcat caaggaggtc  
 300  
 ggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg  
 360  
 gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt  
 407

<210> 1590  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 1590  
 Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val  
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 Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe  
 20 25 30  
 Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln  
 35 40 45  
 Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly  
 50 55 60  
 Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln  
 65 70 75 80  
 Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val  
 85 90 95  
 Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp  
 100 105 110  
 Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val  
 115 120 125  
 Cys Gly Ile Leu Ser Glu Arg  
 130 135

<210> 1591  
<211> 424  
<212> DNA  
<213> Homo sapiens

<400> 1591  
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120  
cgcacattga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc  
180  
agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgtcgt ccctgcacag  
240  
aacgtccagc gagtcctgac tttccagccg ctgcgcttca tccaggagca cgctcctgatc  
300  
cctgtctttg acctcagcgg cccagcagc ctggcccagc ctgtccagta ctcccttgac  
360  
tgtgggatcc ctggctgctc acgcccctga ggaccctcgc gatctgctcc agcacgtgaa  
420  
attt  
424

<210> 1592  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 1592  
Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser  
1 5 10 15  
Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr  
20 25 30  
Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val  
35 40 45  
Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val  
50 55 60  
Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro  
65 70 75 80  
Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro  
85 90 95

<210> 1593  
<211> 1678  
<212> DNA  
<213> Homo sapiens

<400> 1593  
cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg  
60  
atgagaaatg agccattga aggcaaactc tcaactgtata ggcaacaggc atctatcatt  
120  
tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc  
180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt  
240  
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc  
300  
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact  
360  
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag  
420  
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg  
480  
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa  
540  
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta  
600  
cgacagttgc gtcaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag  
660  
tatgatagct gtgcagcagg cctcgaaagc aatcgggtcca aattagaaca ggaagttaga  
720  
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt  
780  
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct  
840  
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa  
900  
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaaag tcatgggtcca  
960  
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag  
1020  
tgctttctga aacaacaaag ccaaacttcc attggtcagg taattcagga ggggtggggag  
1080  
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc  
1140  
tataagccta atctcataat gtatttcttt ttgaaactg atttgtttag cattttgttt  
1200  
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt  
1260  
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagtttag acatcactgg  
1320  
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg  
1380  
tccattaaga aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt  
1440  
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg  
1500  
aagaaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc  
1560  
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta  
1620  
aaggcaaata aacttggtac gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa  
1678

&lt;210&gt; 1594

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1594

```

Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1           5           10           15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
      20           25           30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
      35           40           45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
      50           55           60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
65           70           75           80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
      85           90           95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
      100          105          110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
      115          120          125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
      130          135          140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
145          150          155          160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
      165          170          175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
      180          185          190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
      195          200          205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
      210          215          220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
225          230          235          240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
      245          250          255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
      260          265          270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
      275          280          285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
      290          295          300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
305          310          315          320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
      325          330          335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
      340          345          350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
      355          360          365

```

&lt;210&gt; 1595

&lt;211&gt; 559

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



<400> 1595  
accggtcccc ctcacaggcc cacacctgct tctcctcctg gggcagggca gcctgggtggg  
60  
gcatggccgg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact  
120  
ggtgctgggg cccagccagg gagagcatct tcccgtctgg accttccccg gggcggtca  
180  
tcccttggag atgtaggggtg cagctgagat ggtggcggcc ccattcctgc tggtcgccag  
240  
cctgggctgg ggggtactagg atcacccctg ggctgatgag gagcccgggt cttgggcagt  
300  
taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgcgccagg  
360  
ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc  
420  
tcctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc  
480  
cagcttggag agccagcatc aaggtcaggc ctcacttgcc caagaaagag gagtgaggag  
540  
gccactgga ggaacgcgt  
559

<210> 1596  
<211> 166  
<212> PRT  
<213> Homo sapiens

<400> 1596  
Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu  
1 5 10 15  
Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu  
20 25 30  
Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp  
35 40 45  
Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro  
50 55 60  
Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile  
65 70 75 80  
Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Gln Glu Trp Gly Arg His  
85 90 95  
His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu  
100 105 110  
Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys  
115 120 125  
Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro  
130 135 140  
Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp  
145 150 155 160  
Ala Cys Glu Arg Asp Arg  
165

<210> 1597  
<211> 609

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta  
60  
ccgggtggtt ccgggtggtg ttcagcagct agcttggtt cctttcaggg cccgttggtt  
120  
ttgggcactg ataccggggg ctgatccgc caacctggag cggtgaccgg caccgtcggg  
180  
atcaagccga cctacgggtt gacctccga tacggcggtta tcgctatggc ttcattcttg  
240  
gatactcctg ggccttgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt  
300  
gccgggtcacg acgctatgga ccagaccacg attaatacagc ccacccgggc ggtcgttgag  
360  
gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg  
420  
cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag  
480  
gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgcctt acctgcttat  
540  
taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac  
600  
ggcttacgc  
609

&lt;210&gt; 1598

&lt;211&gt; 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5				10					15		
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35					40					45			
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50					55				60					
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65					70					75				80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
				85				90						95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
		100						105						110	
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145					150					155				160	
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala



130

<210> 1601  
<211> 447  
<212> DNA  
<213> Homo sapiens

<400> 1601  
gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc  
60  
atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg  
120  
ttcttcccg ggcgaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg  
180  
ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc  
240  
gccaccgtcg gaatcttgct tcaggagccc ccgctcaccg aggacaaaac tgttcgcgag  
300  
aacgtcgaag aggccgtcgg cgacatcaaa gccaagctgg cacggttcga ggaagtctcc  
360  
gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat gggtagactg  
420  
cagaccgagc tcgataacgc caacgcg  
447

<210> 1602  
<211> 136  
<212> PRT  
<213> Homo sapiens

<400> 1602  
Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly  
1 5 10 15  
Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala  
20 25 30  
Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu  
35 40 45  
Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu  
50 55 60  
Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr  
65 70 75 80  
Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile  
85 90 95  
Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn  
100 105 110  
Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln  
115 120 125  
Thr Glu Leu Asp Asn Ala Asn Ala  
130 135

<210> 1603  
<211> 540  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag  
 60  
 gaaatccttg aggcgtacct caacgaggtc ttcgtcggtc aggatggcca gcgcgccgtg  
 120  
 cacgggtttg gcttgggccag tcagttcttc tttggccagc ctttggtccga gctgaagttg  
 180  
 catcaagtcg cgttggttggc cgggatggtc aaggggcccg cctattacaa cccgcggcgc  
 240  
 aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggg  
 300  
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc  
 360  
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaagc ccagttgcgt  
 420  
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac  
 480  
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc  
 540

&lt;210&gt; 1604

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55				60					
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85						90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105					110		
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
		115					120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
	130					135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp	
145				150					155					160	
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
			165					170						175	
Arg	Leu	Thr	Gly												
			180												

&lt;210&gt; 1605

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1605

```

acgcgttggt gcggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcgggata tgcactggga tattgcggcc catcgctgt gaccacacat
120
cgcagcgctg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
240
ccagcgctac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
300
tctttctcct tcacaaagta tttggtaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgttaac atcccgacgc ggaagctaac tagcaagcag tctaatacac tcccgggcca
420
aatgttg
427

```

&lt;210&gt; 1606

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1606

```

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
1      5      10      15
Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
20     25     30
His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
35     40     45
Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
50     55     60
Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
65     70     75     80
Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
85     90     95
Arg Thr Asn Ala
100

```

&lt;210&gt; 1607

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1607

```

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcggtcaa
120
cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

```

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,  
240  
tttctgttgg caccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg  
300  
atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg  
360  
gacggaggcg aaggcacggg gcagtcgctg gtcgac  
396

<210> 1608  
<211> 56  
<212> PRT  
<213> Homo sapiens

<400> 1608  
Thr Gly Lys Pro Phe Leu Leu Ala Pro Asp Ser Phe Lys Glu Ser Met  
1 5 10 15  
Thr Ala Lys Glu Val Cys Ile Ala Met Glu Lys Gly Leu Ser Arg Val  
20 25 30  
Tyr Pro Asp Ala Arg Phe Ile His Val Pro Met Ala Asp Gly Gly Glu  
35 40 45  
Gly Thr Val Gln Ser Leu Val Asp  
50 55

<210> 1609  
<211> 505  
<212> DNA  
<213> Homo sapiens

<400> 1609  
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60  
ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac  
120  
gcggcccgcac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gctcatgagg  
180  
ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg  
240  
gccttgtgga gggcgaggag ccgagcgcgc gtgcttcctg ctggcacgat gcgttcacgt  
300  
gctgcgttga tgctgctgat actgatatgc aggatgcgcc cggggtcgaa gacggggaat  
360  
gggggtgaatt ggacgggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat  
420  
gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat  
480  
ggagcgagaa aaagcgggcg tcgac  
505

<210> 1610  
<211> 129  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1           5           10           15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
      20           25           30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
      35           40           45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
      50           55           60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
      65           70           75           80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
      85           90           95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
      100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
      115          120          125
Met

```

&lt;210&gt; 1611

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga attttttagga
60
aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtatttaggt
120
agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttggag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggt gggtcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

&lt;210&gt; 1612

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1           5           10           15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```



	20		25		30
Glu Asp Thr	Ala Lys Val Leu Gly Arg Met Phe Asp Gly	Ile Glu Phe			
35	40	45			
Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly					
50	55	60			
Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met					
65	70	75	80		
Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly					
85	90	95			
Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser					
100	105	110			
Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr					
115	120	125			
Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu					
130	135	140			
Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala					
145	150	155	160		
Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser					
165	170	175			
Thr					

<210> 1613  
 <211> 584  
 <212> DNA  
 <213> Homo sapiens

<400> 1613  
 nnacgcgttc agccgagaaa tatgctgctt tttgcctgcc acctcacaaa tgctacggca  
 60  
 cagggcgctcc aggttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg  
 120  
 gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca  
 180  
 tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgtttcttc  
 240  
 tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataatgtgcy tatgctggc  
 300  
 acggtaaaagt gtcgcgggct tgtagatgcy tgtgaacgtt ttcgtgactt gaagaggtcg  
 360  
 aagctgatgt gttcgcgtga gctcgatgca gcgcgctgcy ttgctgacct tgtggctgat  
 420  
 cgtcgccccg atccgataga atgcccaggtt gtattttcgt agtactgctc gacaatgcc  
 480  
 gtgggagagg cgatgagttc ctcatttgcy tctttctcga ggtcttggtc catgtccata  
 540  
 aacataccaa agctggatgg gtcatacgac ggcgcagcat gcat  
 584

<210> 1614  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1614

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr  
 1 5 10 15  
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys  
 20 25 30  
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys  
 35 40 45  
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly  
 50 55 60  
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser  
 65 70 75 80  
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val  
 85 90 95  
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu  
 100 105 110  
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu  
 115 120 125  
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp  
 130 135 140  
 Pro Ile Glu Cys Gly Val Val Phe Ser  
 145 150

&lt;210&gt; 1615

&lt;211&gt; 363

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1615

gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc  
 60  
 tcgggtgcttg tcagtgtctgg tgtcatcatt tccctgcttg gggctctact ggcctggatc  
 120  
 ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc  
 180  
 ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc  
 240  
 cagatatgcc ttgtcatgac ggtgttggtg gacgggtgctt acttggcgat ggcgaccctg  
 300  
 gctgccgccc tcatcctggt gccgtacctg ctgtcagccg cattcgccct gaagatgggtg  
 360  
 atc  
 363

&lt;210&gt; 1616

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1616

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val  
 1 5 10 15  
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu  
 20 25 30  
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

      35              40              45
Val  Pro  Gly  Glu  Asp  Gly  Thr  Met  Pro  Lys  Leu  Phe  Gly  Arg  Ile  Asn
      50              55              60
Lys  His  Glu  Ala  Pro  Ala  Pro  Ala  Leu  Trp  Ile  Thr  Asn  Ile  Val  Ser
65              70              75              80
Gln  Ile  Cys  Leu  Val  Met  Thr  Val  Leu  Trp  Asp  Gly  Ala  Tyr  Leu  Ala
      85              90              95
Met  Ala  Thr  Leu  Ala  Ala  Ala  Leu  Ile  Leu  Val  Pro  Tyr  Leu  Leu  Ser
      100             105             110
Ala  Ala  Phe  Ala  Leu  Lys  Met  Val  Ile
      115             120

```

&lt;210&gt; 1617

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1617

```

accggtgact acctgtggga gaagaagggc atcgttccca tcctcaagat tgataagggc
60
ctggctgacg agggctgcca cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaacccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcattccgag agcacatcga ctctctgccg
360
ctcgacgcca agatcatgtt gaagctgacg atcccgagtt ccgaagacct gtatgccgac
420
ctcattgcgg atccgaaggt cctacgc
447

```

&lt;210&gt; 1618

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1618

```

Thr  Gly  Asp  Tyr  Leu  Trp  Glu  Lys  Lys  Gly  Ile  Val  Pro  Ile  Leu  Lys
1      5      10      15
Ile  Asp  Lys  Gly  Leu  Ala  Asp  Glu  Gly  Cys  His  Val  Arg  Leu  Met  Lys
      20      25      30
Pro  Ile  Pro  Gly  Leu  Asp  Glu  Leu  Val  His  Arg  Ala  Val  Glu  Glu  Lys
      35      40      45
His  Ile  Phe  Gly  Thr  Lys  Glu  Arg  Ser  Val  Ile  Leu  Asp  Asp  Asp  Lys
      50      55      60
Ala  Gly  Ile  Glu  Lys  Ile  Val  Asp  Gln  Gln  Phe  Glu  Leu  Ala  Glu  Gln
65              70              75              80
Val  Arg  Ala  Ala  Gly  Leu  Val  Pro  Ile  Leu  Glu  Pro  Glu  Val  Asp  Ile
      85              90              95
His  Ala  Pro  His  Lys  Glu  Lys  Ala  Glu  Glu  Arg  Leu  His  Asn  Leu  Ile

```

```

          100          105          110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
          115          120          125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
          130          135          140
Pro Lys Val Leu Arg
145

```

```

<210> 1619
<211> 355
<212> DNA
<213> Homo sapiens

```

```

<400> 1619
nnggtaccga aaccggtgtc gctaccgcat aaaatcaaag gaactagtat gcataacgta
60
acaacaaatg gtgcctccat tcccgccctt ggccttggca ctttccgtat gcccggcgaa
120
gatgtgcttc gcatcgctcc ttacgcgctc aaggctgggt ttcgccatgt cgataccgcg
180
cagatztatg gcaatgaagt cgaggctcgg gaagcaattg cgacttccgg cgttcagcgt
240
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
300
gcattctgtc atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
355

```

```

<210> 1620
<211> 118
<212> PRT
<213> Homo sapiens

```

```

<400> 1620
Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
1          5          10          15
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
          20          25          30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
          35          40          45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
          50          55          60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
65          70          75          80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
          85          90          95
Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
          100          105          110
Asp Tyr Val Asp Leu Leu
          115

```

```

<210> 1621
<211> 386
<212> DNA
<213> Homo sapiens

```

&lt;400&gt; 1621

gcgcgccatg gaggcgcccc gggtcgcgcc aggatgctcc aggccaagtg aagcgggtccg  
 60  
 gctgggggtcg gcgggacccg cgggccatgt acggcgacat attcaacgcc acggggcggg  
 120  
 cccccgaggc ggcggtaggc agcgcgctgg ccccaggagc cacgggtcaag gcagaaggcg  
 180  
 ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcggcc acaaagcccc  
 240  
 acctgcccac ctacctgctg ctcttcttcc tgctgctgct ctcgggggcg ctcggcggcc  
 300  
 tcttcacggg ttgccagctg cgccattcgg ctttcgccgc gctgccccac gaccgcttcg  
 360  
 ctgcgcacgc ccgcgcgcc ggaagg  
 386

&lt;210&gt; 1622

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1622

Met	Glu	Ala	Pro	Arg	Val	Ala	Pro	Gly	Cys	Ser	Arg	Pro	Ser	Glu	Ala
1				5				10					15		
Val	Arg	Leu	Gly	Ser	Ala	Gly	Pro	Ala	Gly	His	Val	Arg	Arg	His	Ile
		20					25					30			
Gln	Arg	His	Gly	Ala	Gly	Pro	Arg	Gly	Gly	Gly	Arg	Gln	Arg	Ala	Gly
	35					40						45			
Pro	Arg	Ser	His	Gly	Gln	Gly	Arg	Arg	Arg	Phe	Ala	Ala	Gly	Ala	Gly
	50				55					60					
His	Cys	Ala	Arg	Tyr	Glu	Gly	Arg	Arg	Gly	His	Lys	Ala	Arg	Pro	Ala
65				70					75					80	
His	Leu	Pro	Ala	Ala	Leu	Leu	Pro	Ala	Ala	Ala	Leu	Gly	Gly	Ala	Arg
			85				90							95	
Arg	Pro	Leu	His	Arg	Leu	Pro	Ala	Ala	Pro	Phe	Gly	Leu	Arg	Arg	Ala
		100				105						110			
Ala	Pro	Arg	Pro	Leu	Arg	Ser	Arg	Arg	Pro	Arg	Ala	Arg	Lys		
		115				120						125			

&lt;210&gt; 1623

&lt;211&gt; 314

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1623

nctggtgccc agagcctcgt cgggggtccag ccccagggcc tttgcgagtc agacacttgg  
 60  
 ggcccttgct tgtggttttt ctgggagctt tgggcccagg gttccccgga cccttccttg  
 120  
 aacttttccg cagtttcaga ggagagtctg caagtgcagag ctgcagtgcac tgtgccttgc  
 180  
 gcttgccacc caagcagggc atgggagctc taagtgaac cagggcctca aggacaacag  
 240

agagccgcat ggcagggtag acacctggat aaaagtgggt gggggaagcc cactgctgca  
 300  
 ccccgggcat tgct  
 314

<210> 1624  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1624  
 Met Pro Gly Val Gln Gln Trp Ala Ser Pro Thr His Phe Tyr Pro Gly  
 1 5 10 15  
 Val Tyr Pro Ala Met Arg Leu Ser Val Val Leu Glu Ala Leu Val Pro  
 20 25 30  
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser  
 35 40 45  
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser  
 50 55 60  
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr  
 65 70 75 80  
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro  
 85 90 95  
 Arg Arg Gly Ser Gly His Gln  
 100

<210> 1625  
 <211> 619  
 <212> DNA  
 <213> Homo sapiens

<400> 1625  
 acgcgtactc agcagcaagt tctgctgagc cccaaatcca cacagactga gcctggacca  
 60  
 gggctgggccc ctccttatcc aagccaatcc agggaaacac tgtgctgact tcaaggcaga  
 120  
 agggacaaga aagcatgact gtgcacaaat tggctttgca gccatctcca ccaggtagcc  
 180  
 ctgggagcac ctgggaagaa gccgggcat gcaggagacc caacctcacc ctgcattcag  
 240  
 aaccgggcct tggaatggcc tgatctgagc cctagcacc ctgggaagcc gcccaccttt  
 300  
 cttctggcct ctgggaagaa gatgggaatt ttaaggccat gggagaagac actcctggat  
 360  
 tctttcagct tctccacca cccctgctc cagatgtaat ctgggaagac tggggagtca  
 420  
 ggggcacagt gagttggagc aggggattgg agggtttggt ggacagcctt ccagggcacc  
 480  
 tcaggagctg aattatttaa gccagctgcc cgtgggcccc gctcccagcc cttcctgttt  
 540  
 acacagactc cgtccatagc agacaccttc ccagagcctg ggtgacaata ggctgggtgt  
 600  
 gttttctgca atcttatag  
 619

<210> 1626  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1626  
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg  
 1 5 10 15  
 Ala Ala Gly Leu Asn Asn Ser Ala Pro Glu Val Pro Trp Lys Ala Val  
 20 25 30  
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser  
 35 40 45  
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu  
 50 55 60  
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe  
 65 70 75 80  
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly  
 85 90 95  
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe  
 100 105

<210> 1627  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 1627  
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 60  
 gataccagtg gggcgagggg gcaacgcgcg tgcgcgcggg atgcaaata gtcacgatga  
 120  
 cacgaagtct atcgggatcc gctgacagac tccggtaaaag ttcccgccat ggcagaacct  
 180  
 actggaacc cggtgagtc cagctcggac ttcattcatc aggttggttcg cgcgacatc  
 240  
 caacaggaca cctacggcgg gcgcgtccag acccggttcc cacctgagcc taacggctac  
 300  
 ctccacattg gccacgcgaa ggccatcgtc accgatttcg gcgttgccga ggatttcggc  
 360  
 ggcacctgca acctgagact tgatgatact aatccaggca ccgaggaaac cgagtatgtc  
 420  
 ggtcgatcg ttgcagacat tgagtgggta gggtactccc cggcccacgt tgtccacgcg  
 480  
 t  
 481

<210> 1628  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1628  
 Met Ala Glu Pro Thr Gly Asn Pro Ala Glu Ser Ser Ser Asp Phe Ile

1	5	10	15
His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg			
	20	25	30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly			
	35	40	45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly			
	50	55	60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu			
	65	70	75
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr			
	85	90	95
Ser Pro Ala His Val Val His Ala			
	100		

<210> 1629  
 <211> 4519  
 <212> DNA  
 <213> Homo sapiens

<400> 1629  
 ccaaattgct gggaatgtcc aaagtgtctac caggaggaca gctcggagaa agcccagaag  
 60  
 cggaatatgg aagagagtga cgaagaagct gtgcaagcca aagtccctgcg gcccctgcgg  
 120  
 agctgcatg agcctctcac gccccgcct cattcaccca cttccatgct gcagctcatc  
 180  
 catgacccgg tttccccccg gggatatgtg actcgggtcat cccctggggc tggccccagc  
 240  
 gaccaccaca gtgccagccg cgatgagcgc ttcaaacggc ggcagttgct gcggctgcag  
 300  
 gccacagagc gcaccatggt acgggaaaag gagaacaatc ccagcggcaa aaaggagctg  
 360  
 tctgaagttg agaaagccaa gatccgggga tcgtacctca ctgtcacgct acagaggccc  
 420  
 accaaagagc tccacgggac atccattgtg cccaagctgc aggccatcac ggctctctct  
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 660  
 gatggagacg aaagctggat gcagcgggag gtctggatgt ctgtcttccg ctacctcagc  
 720  
 cgcagagaac tttgtgaatg tatgcgagtg tgcaagacgt ggtataaatg gtgctgcgac  
 780  
 aagagacttt ggacaaaaat tgacttgagt aggtgtaagg ccattgtgcc ccaggccctc  
 840  
 agtggcatca tcaagaggca gccagtcagc cttgacctca gttggaccaa catctctaaa  
 900  
 aagcaactga catggctcgt caataggctg ccaggactga aagacctcct cctagcaggc  
 960  
 tgctcctggt ctgcagtctc tgccctcagc acctccagct gcccccttct caggaccctt  
 1020



gatcttcggt gggcagtagg aatcaaggac cctcaaattc gggacttgct tactccaccg  
1080  
gctgataaac caggtcagga caatcgcagc aagctccgga acatgaccga cttccggctg  
1140  
gcaggccttg acatcacaga tgccacgctt cgctcataa ttcgccacat gcccctcctg  
1200  
tctcgactcg acctcagtca ctgcagccac cttacagatc agtcctccaa tctactcact  
1260  
gctgtcgggt cttccactcg ctactctctc acagagctca atatggcagg ttgcaataaa  
1320  
ttgacagacc agaccctgat ctacctacgg cgcattgcc aacgtcacctt gatcgacctt  
1380  
cgaggatgca agcagatcac tcgaaaagcc tgcgagcact tcattctcaga cttgtccatc  
1440  
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1500  
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1560  
cgaccctgca cgggctctgg ggccagcgtc acactccctc tctgctctcc tgtcccttga  
1620  
gcccttcctc tacaggtggg gcagagaggg tggtggacac caggcttatt tgcctgctcc  
1680  
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1740  
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1800  
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1980  
cagcagcccc aggagtccca gaccctgccc gatcacactg gtgctgttga gatctcccaa  
2040  
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2100  
gcactcgtgc ttgttcacat aattagggtt cccaccccag cctaccgcac ttacttgcta  
2160  
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2220  
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2460  
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2520  
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2580  
cagccatgga agggggtgtg cacgtgcctc tgtgtgtgtg gctgagtgtg ttctgcgcgt  
2640

gtgtgtggag ggagggaggg aggggagcat ggtgtctccc gctccaccgc cctttgttga  
2700  
gccccatcag ctgccccctt ttactttgca ttgaacggcc tgtccaaaga tcctctctct  
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2880  
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2940  
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3120  
gcacccttgc cacttccaaa gcaatagagg cagagtggtc ccctctttgc cacctaggcc  
3180  
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3240  
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3300  
tcccatgacc ctctgccac ttccattgggt ctccaggccc caataatctg gggttgaaac  
3360  
tttgaggaaa tgccagtac ttattccaga gtgcctcagt taggggaact tctctgtaaa  
3420  
gaaccctggg tattgagcaa aaaccttatt atcgttaatg acctataatt ggaagcttcc  
3480  
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3540  
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3600  
agtgcctctg actttgggac atttcatcca cagaaatttc caagccaatg gtttcttttg  
3660  
ggttttgggt tttatgtttg ttttttgggg tttggaaaa catgcatttt taccgtgcac  
3720  
gtaaatttgt cagcagaaaa gggagcccag aaaaggcagc agatggacca tgcccttgct  
3780  
gggttttctt tttctttggg actgtgaggg gaaatggttt ttagaggtga gggttggtcc  
3840  
atgtggagga aagaagtgtc tctgttgggg gacagaggaa cctggggagt ccatcgcatg  
3900  
tcctacaatc tgctcttaga cacggccttg ccaggagagc ctgccctcag actgcaggac  
3960  
cagaaccctt gcctccatct ttccaagcac cggggcgaaa aaccacaaag gaaaggaaga  
4020  
aaatttatat atatataata taaaatcact tggtgattaa aaaaataact gctccataaa  
4080  
taaaactcct aaagtcactt atgtttaaag ggtttggttg tgttttttgt ttttcggaga  
4140  
aatattgtaa atatataatt ttttgttgct gatttagagt caatctccaa tgttgtgcta  
4200  
aaaagtttaa attaaatgta agcattaagg ggataagtct tatgctatct cagttgacac  
4260

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 4440  
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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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Lys	Ala	Gln	Lys	Arg	Lys	Met	Glu	Glu	Ser	Asp	Glu	Glu	Ala	Val	Gln
			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
			35				40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
				85					90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115					120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145					150					155				160	
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
				165				170						175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200					205			
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225					230					235				240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
				245					250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
			260					265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290 295 300  
 Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly  
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 Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu  
 325 330 335  
 Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln  
 340 345 350  
 Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn  
 355 360 365  
 Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp  
 370 375 380  
 Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu  
 385 390 395 400  
 Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser  
 405 410 415  
 Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu  
 420 425 430  
 Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr  
 435 440 445  
 Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys  
 450 455 460  
 Gln Ile Thr Arg Lys Ala Cys Glu His Phe Ile Ser Asp Leu Ser Ile  
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<210> 1631  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

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 240  
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<210> 1632  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 1632  
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 1 5 10 15  
 Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val



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cgtcgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat  
180  
gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa  
240  
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300  
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420  
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&lt;210&gt; 1636

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
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Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20					25					30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
		35					40					45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
	50					55					60				
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65				70						75				80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85						90					95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
			100					105					110		
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
		115					120					125			
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
	130					135					140				
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145				150						155				160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

				165					170					175					
Lys	Gly	Leu	Met	Thr	Leu	Gln	Ala	Leu	Tyr	Gly	Thr	Ile	Pro	Gln	Ile				
			180						185					190					
Phe	Gly	Lys	Gly	Glu	Cys	Ala	Arg	Val	Arg	Thr	Gly	Cys	Phe	Val	Val				
		195					200					205							
Val	Lys	Glu	Gly	Pro	Ser	His	Pro	Lys	Arg	Glu	Glu	Glu	Arg	Glu	Ala				
	210					215					220								
Pro	Tyr	Lys	Gln	Ile	Gln	Leu	Ile	Leu	Ile	Ile	Tyr	Glu	Tyr	Cys	Thr				
225					230					235					240				
His	Glu	Phe																	

&lt;210&gt; 1637

&lt;211&gt; 357

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1637

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240
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300
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357

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&lt;210&gt; 1638

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1638

Xaa	Met	Met	Thr	Gln	Thr	Pro	Ala	His	Pro	Gly	Leu	Ile	Ser	Leu	Gln				
1				5					10					15					
Gly	Ile	Gly	Lys	Arg	Tyr	Gln	Leu	Ala	Gly	Gln	Lys	Leu	Ser	Ile	Leu				
		20					25					30							
Asn	Asp	Val	Cys	Leu	Ser	Ile	Ser	Arg	Gly	Asp	Ser	Cys	Gly	Ile	Leu				
	35					40					45								
Gly	Ala	Ser	Gly	Ser	Gly	Lys	Ser	Thr	Leu	Leu	Asn	Ile	Leu	Gly	Leu				
	50				55					60									
Leu	Asp	Leu	Pro	Asn	Ser	Gly	Gln	Tyr	His	Phe	Ala	Gly	His	Asp	Ile				
65				70					75				80						
Leu	Ala	Leu	Thr	Pro	Asp	Glu	Leu	Ser	Ala	Ile	Arg	Asn	Ser	Xaa	Xaa				
			85				90					95							
Met	Val	Val	Phe	Gln	Ser	Phe	Asn	Leu	Leu	Pro	Arg	Leu	Ser	Ala	Leu				
		100					105					110							
Asp	Asn	Val	Ala	Leu	Pro	Leu													
		115																	

<210> 1639  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
 attgatccga cattacgtcg tggtatggat gagattgata agaaaccgga actaaaagaa  
 240  
 cgcttttgtaa catcggatga ggcttgggat atgatgactt ctaagacgac tgtcgttgtt  
 300  
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc  
 360  
 aaagtagtca ttgatcatca tagacgtggc gaaact  
 396

<210> 1640  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1640  
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu  
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 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu  
 20 25 30  
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn  
 35 40 45  
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr  
 50 55 60  
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu  
 65 70 75 80  
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr  
 85 90 95  
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu  
 100 105 110  
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg  
 115 120 125  
 Arg Gly Glu Thr  
 130

<210> 1641  
 <211> 376  
 <212> DNA  
 <213> Homo sapiens

<400> 1641  
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tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg  
 120  
 gggtaggtga ctcccaacct aaagaacca ctgagacata tgtggcttcc ctctccacc  
 180  
 ttcattgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta  
 240  
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta  
 300  
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac  
 360  
 gttatttgga aaaaag  
 376

<210> 1642  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1642  
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly  
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 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro  
 20 25 30  
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly  
 35 40 45  
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr  
 50 55 60  
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro  
 65 70 75 80  
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Thr Ser Glu Trp Asp Val  
 85 90 95  
 Ile Trp Lys Lys  
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<210> 1643  
 <211> 494  
 <212> DNA  
 <213> Homo sapiens

<400> 1643  
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 120  
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct  
 180  
 ctgcttgat ccaggatata agaaaggagg ggcacacact gtgggggaac tctgggggtcc  
 240  
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc  
 300  
 cagcccatg ctcacagccc tataagtgca cgatggcacc ctatatcatc taagcggggc  
 360  
 tgtgcctcct gaggctttag ggacaccaga atgagcccc ctcggcggag tctggctctg  
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ggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca  
 480  
 ccatcccccg tgtg  
 494

<210> 1644  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 1644  
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro  
 1 5 10 15  
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys  
 20 25 30  
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly  
 35 40 45  
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro  
 50 55 60  
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser  
 65 70 75 80  
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val  
 85 90 95  
 Pro Met Glu Phe Trp Lys Leu  
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<210> 1645  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1645  
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 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag  
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 180  
 cagtcactat ccgtggctga gtcgcggttg aagcaggggtg ccagcatcct gatccgggct  
 240  
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct  
 300  
 ggggcccaaga tgctagccaa ggctctacgc  
 330

<210> 1646  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1646  
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 1 5 10 15  
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

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<400> 1648
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Val Ala Thr Ser Val Pro Ile Gly Trp Gln Arg Cys Val Arg Glu Gly
          20          25          30
Ala Val Leu Tyr Ile Ser Pro Ser Gly Thr Glu Leu Ser Ser Leu Glu
          35          40          45
Gln Thr Arg Ser Tyr Leu Leu Ser Asp Gly Thr Cys Lys Cys Gly Leu
          50          55          60
Glu Cys Pro Leu Asn Val Pro Lys Val Phe Asn Phe Asp Pro Leu Ala
65          70          75          80
Pro Val Thr Pro

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<210> 1649  
 <211> 441  
 <212> DNA  
 <213> Homo sapiens

<400> 1649  
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 120  
 gaagacttcc acgggatgga agaatgcata gatcagatcg ttctgtatatt ccgccacgcc  
 180  
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt  
 240  
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 300  
 aagggctcgc cggctcttca gtcgcccctg gggttgttca acgccactga agacggcgcg  
 360  
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 420  
 gcgaccaagc gcctggccga a  
 441

<210> 1650  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1650  
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 1 5 10 15  
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys  
 20 25 30  
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu  
 35 40 45  
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu  
 50 55 60  
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly  
 65 70 75 80  
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro  
 85 90 95  
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu  
 100 105 110  
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile  
 115 120 125  
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg  
 130 135 140  
 Leu Ala Glu  
 145

<210> 1651  
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

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120  
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt  
180  
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga  
240  
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360  
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408

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

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Gly	Ala	Arg	Leu	Arg	Arg	Glu	Leu	Ser	Glu	Arg	Leu	Glu	Asp	Tyr	Ala
			20					25					30		
Ala	Gln	Thr	Ser	Met	Val	Arg	Ser	Val	His	Ser	Leu	Ala	Phe	Ala	Leu
			35					40					45		
Leu	Arg	Thr	Ala	Ala	Glu	Glu	Glu	Leu	Arg	Leu	Ile	Thr	Gly	Ala	Asp
			50				55					60			
Xaa	Asp	Ala	Val	Ile	Arg	Glu	Leu	Leu	Thr	Gly	Gln	Ala	Glu	Asp	Gly
65					70					75				80	
His	Gly	Ser	Trp	Pro	Ala	Glu	Met	Arg	Pro	Ala	Trp	Asn	Xaa	Cys	Gly
				85					90					95	
Leu	Ser	Arg	Gln	Leu	Arg	Asp	Phe	Leu	Leu	Arg	Ser	Ile	Glu	Arg	Gly
			100					105					110		
Leu	Gly	Pro	Gly	Asp	Leu	Glu	Ser	Leu	Gly	Ala	Glu	His	Gly	Arg	Pro
			115				120						125		
Met	Trp	Ser	Ala	Ala	Gly	Glu	Phe								
			130				135								

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

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120

ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc  
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 240  
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag  
 300  
 cgcgatgcct tgatcgtggc ggccgggtgct gcacagggtgg cacaagcag cacacccgtg  
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 cagatatggc gctgggaaca gctccgactt tgtctaga  
 398

<210> 1654  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1654  
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 20 25 30  
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 35 40 45  
 Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val  
 50 55 60  
 Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp  
 65 70 75 80  
 Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala  
 85 90 95  
 Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln  
 100 105 110  
 Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu  
 115 120 125  
 Arg Leu Cys Leu  
 130

<210> 1655  
 <211> 1115  
 <212> DNA  
 <213> Homo sapiens

<400> 1655  
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 ctggagggcg agcgtggcaa gagggcccccg ccggagggcg agcctgcagc cccggcgtcc  
 120  
 ggagttctgg ataagctttt cggaagcgg ctctctgcagg ctggctgcta cctgggtgtcc  
 180  
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca  
 240  
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc  
 300  
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc  
 360

gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag  
 420  
 gccgagtttg gcggggggcac ccgcggttcc tcctgcgagg aggactttat ctatgagaat  
 480  
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg  
 540  
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac  
 600  
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcaggtggt ccctgtccac  
 660  
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag  
 720  
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgcttggtg  
 780  
 ggctttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc  
 840  
 acagaggctg atcagacaag ccgggatggt tcctgctggg tctttgcct cttcaacgtg  
 900  
 atctggtcga cgctgttcc ataggaatgg aagcgtatag gggctgagct gggatataat  
 960  
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcaggtgc  
 1020  
 gtgcgacgta tcatcccat cactcggggc gaggagtctt actaccgcc ctggaagcgg  
 1080  
 ctgctcttcc agctgcttgt tagcctccgc ctgtg  
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
	50					55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70				75					80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
			85					90					95		
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120				125				
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135				140					
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145				150					155					160	
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

```

          165          170          175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
          180          185          190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
          195          200          205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
          210          215          220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
225          230          235          240
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
          245          250          255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
          260          265          270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
          275          280          285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
          290          295

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<210> 1657

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1657

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tgtagaggct cgaggatcatc cggaccatgt ggtccaggac gccccgtcc tccgggcccc
60
gcacggagac gcggcgctcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccc cgggcttccc gcgccgcttc agggggcggg cggcagctcg ggccggtact
180
tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
300
gcgtggacat ccgcccctgc tagcatcagg gct
333

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<210> 1658

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1658

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Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
1          5          10          15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
20          25          30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
35          40          45
Glu Val Pro Ala Arg Ala Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
50          55          60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65          70          75          80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```



85 90 95  
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu  
 100 105

<210> 1659  
 <211> 382  
 <212> DNA  
 <213> Homo sapiens

<400> 1659  
 nnaagcttat ttgttattac taatatatttc cgtgaccaga tgggccgcta tggtgagatt  
 60  
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc  
 120  
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt  
 180  
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc  
 240  
 tgtcccgact gccaaggcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc  
 300  
 tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg  
 360  
 gttgagttaa ccaacaatcg cn  
 382

<210> 1660  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 1660  
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg  
 1 5 10 15  
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg  
 20 25 30  
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe  
 35 40 45  
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu  
 50 55 60  
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu  
 65 70 75 80  
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala  
 85 90 95  
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp  
 100 105 110  
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg  
 115 120 125

<210> 1661  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg cgggtcctt gcctgtgacc ttcttgtaca  
 60  
 gctgcgggta gtagagctcc aggtctctga ggaaggccac gtagcccttg tggccggtec  
 120  
 gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttggggtcgc  
 180  
 tgagcacctg ctctcatca tcaggggtca ggaccttgca ctgccgcagg taagggtgta  
 240  
 tgcgtgaggg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc  
 300  
 actcgtcatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtggtgggg  
 360  
 agtgctgaga gcgatgccgg ctctgcccc caccggggc cagctccac tccttctcag  
 420  
 acgtggggc agggctctcg tcagggcatc gagggggatc agccaggcg catccaggag  
 480  
 aggtgcccag ctccgtgtcc catcccacgc ttgatecgtg catg  
 524

&lt;210&gt; 1662

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25					30		
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
		35				40						45			
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
	50					55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65				70						75				80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85						90					95	
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
		100						105					110		
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
	115					120						125			
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
	130				135						140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145				150						155				160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
			165						170						

&lt;210&gt; 1663

&lt;211&gt; 321

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1663

nnagtacttg tcatgattac gcttagtttg ggtatctatt tctctcagcg ttctcagatc  
 60  
 tcccgaaacc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag  
 120  
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg  
 180  
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg  
 240  
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg  
 300  
 caagaggctt gcggatcagt c  
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
		20					25					30			
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
	35					40					45				
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50				55					60					
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70				75						80	
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90						95	
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggg  
 60  
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc  
 120  
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct  
 180  
 gcggcaacag atgacttttt agagtctgtt gatttggtgt tgctcgacgt caaatcggga  
 240  
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgattttggt  
 300  
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggt tcgttggtgg ccccggtatc  
 360  
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct  
 420

gtttcacgcg t  
431

<210> 1666  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 1666  
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg  
1 5 10 15  
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln  
20 25 30  
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile  
35 40 45  
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp  
50 55 60  
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly  
65 70 75 80  
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr  
85 90 95  
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile  
100 105 110  
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu  
115 120 125  
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg  
130 135 140

<210> 1667  
<211> 370  
<212> DNA  
<213> Homo sapiens

<400> 1667  
tccgctgaga ccagcggttg tgacttccca ggtgagactg tccgcacccat ggccaagatc  
60  
gttgagtcta ctgaggccccg tggcttggac aagatcgcca agatcgactg ggatccgcac  
120  
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag  
180  
ttcatcgtgg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg  
240  
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgccctgggtc  
300  
tgggggcgctc acgcccgtcg taccgccgtg tttaagaatg cggaggagct gtaccgctgg  
360  
gttaacgcgt  
370

<210> 1668  
<211> 123  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
          20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
          35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
          50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
          85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
          100          105          110
Asn Ala Glu Leu Tyr Arg Trp Val Asn Ala
          115          120

```

&lt;210&gt; 1669

&lt;211&gt; 1491

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1669

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ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtgga ctggaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttgga tacgagttag ctccacttag cttcgttaag
900

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<210> 1670
<211> 132
<212> PRT
<213> Homo sapiens
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<210> 1671
<211> 432
<212> DNA
<213> Homo sapiens
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BNSDOCID: <WO\_\_0058473A2\_1\_>

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg  
 120  
 gcatcccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgctcgctcg  
 180  
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttctt catgaagacg  
 240  
 gcagccccga cgttggttggc taacaccgat aactttttca cgtcccgggc ttggacaacg  
 300  
 gatcagaacc cgccggcctt tggatatccag gccctgctat ggacgacagt catctcatcc  
 360  
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctggt tatcaccacg  
 420  
 ctgcgaccta gg  
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
50					55						60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65				70					75					80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
			85					90					95		
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
		100					105						110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115				120						125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
130						135						140			

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

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 120  
 ggctcccagc gtctttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc  
 180  
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact  
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg  
 300  
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac  
 360  
 gcagggttag tgctgggacc cagaaccagt caactggttt t  
 401

<210> 1674  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1674  
 Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe  
 1 5 10 15  
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro  
 20 25 30  
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro  
 35 40 45  
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala  
 50 55 60  
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr  
 65 70 75 80  
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr  
 85 90 95  
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala  
 100 105 110  
 Arg

<210> 1675  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1675  
 gccggcgcac ccacctggga cgtgggtgaaa tcggcaaaac tcacctcttt agctacctgc  
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 gcgccaaccg cacgggcagc ctccacacag ccctctagag cgctgctgga cagaatggct  
 120  
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta  
 180  
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtccct cgcactccac  
 240  
 ccgacacgc cctgggaacc gtcaccgcg gtaccaccgg gtcaatcggc tccgcaaagt  
 300  
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gtcctgtaac gccgtctgca  
 360  
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg  
 420  
 atgcagcaac aggcgctccg ctgcgtatcg atctgggata cggcgccgcc ccctggacca  
 480  
 ctgttgagat ggctacgcgt  
 500



<210> 1676  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 1676  
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp  
 1 5 10 15  
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg  
 20 25 30  
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr  
 35 40 45  
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr  
 50 55 60  
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu  
 65 70 75 80  
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu  
 85 90 95  
 Arg

<210> 1677  
 <211> 631  
 <212> DNA  
 <213> Homo sapiens

<400> 1677  
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 60  
 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cnnccggggag  
 120  
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtggtc gaatggtcgg  
 180  
 gtggggccttt tcggtaaatc ctacgatggg gggacggggt cttattgctg caggtaatca  
 240  
 gccgcggggg ttggctgctg tgggtggcgca ggagccagct atggagccct acacttacct  
 300  
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat  
 360  
 tgctgcctcc cccggccgtg tccttcacga cactcccga tatatgaaga acagtgtcta  
 420  
 cgagggtggcc caccgcatt gcctgtccga caatttgcgt aattcttttag accccatccg  
 480  
 tagccacaaa taatgggcgg gatcggtctt tcctcacca agacgcataa tttcccccg  
 540  
 gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttgggtga  
 600  
 attgttgaag gaccgtaagg ctccgacgcg t  
 631

<210> 1678  
 <211> 78  
 <212> PRT

<213> Homo sapiens

<400> 1678

```

Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10          15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
          20          25          30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
          35          40          45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
          50          55          60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
65          70          75

```

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

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nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg ttacccaagc cagtggatcat cttgccgtgc
180
cagcacaacc tgtgccgga gtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgccc tacctgccgc
300
cacgaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctggtggag
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

```

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

```

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10          15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
          20          25          30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
          35          40          45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
          50          55          60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

65					70					75				80
Arg	Asn	Leu	Leu	Val	Glu	Asn	Ile	Ile	Asp	Ile	Tyr	Lys	Gln	Glu
				85					90					95
Ser	Ser	Arg	Pro	Leu	Gln	Lys	Gly	Ser	His	Pro	Met	Tyr	Lys	Glu
			100					105					110	His
Glu	Asp	Glu	Lys	Ile	Asn	Ile	Tyr	Cys	Leu	Thr	Cys	Glu	Val	Pro
		115					120					125		Thr
Cys	Ser	Met	Cys	Lys	Val	Phe	Gly	Ile	His	Lys	Ala	Cys	Glu	Val
	130					135					140			

<210> 1681  
 <211> 396  
 <212> DNA  
 <213> Homo sapiens

<400> 1681  
 gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc  
 60  
 ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc  
 120  
 tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg  
 180  
 cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac  
 240  
 ctgggtccgtt acaagaagga gccttcgggg tgcccgggtgt gtggcaaggt gttctcctgc  
 300  
 cggagcaata tgaacaagca cctgtccacc cacggcgaca agaagtacac ctgcgagatc  
 360  
 tgcgggcgca agttcttccg cgtggatgtg ctcagg  
 396

<210> 1682  
 <211> 132  
 <212> PRT  
 <213> Homo sapiens

<400> 1682														
Glu	Phe	His	Asn	Cys	Arg	Thr	Asp	Asp	Lys	Thr	Phe	Gln	Cys	Glu
1				5					10				15	Met
Cys	Phe	Arg	Phe	Phe	Ser	Thr	Asn	Ser	Asn	Leu	Ser	Lys	His	Lys
			20					25				30		Lys
Lys	His	Gly	Asp	Lys	Lys	Phe	Ala	Cys	Glu	Val	Cys	Ser	Lys	Met
		35					40				45			Phe
Tyr	Arg	Lys	Asp	Val	Met	Leu	Asp	His	Gln	Arg	Arg	His	Xaa	Gly
	50					55				60				Arg
Ser	Ala	Ala	Ser	Glu	Ala	Xaa	Glu	Asp	Leu	Glu	Ala	Gly	Gly	Glu
65				70					75				80	Asn
Leu	Val	Arg	Tyr	Lys	Lys	Glu	Pro	Ser	Gly	Cys	Pro	Val	Cys	Gly
			85					90					95	Lys
Val	Phe	Ser	Cys	Arg	Ser	Asn	Met	Asn	Lys	His	Leu	Leu	Thr	His
		100						105				110		Gly
Asp	Lys	Lys	Tyr	Thr	Cys	Glu	Ile	Cys	Gly	Arg	Lys	Phe	Phe	Arg
		115				120						125		Val
Asp	Val	Leu	Arg											

130

&lt;210&gt; 1683

&lt;211&gt; 676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1683

```

nncggccgga caggtcccga gcagccccgc ccaacatgga cccagacccc caggcgggcg
60
tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tgcacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtccgg caccccaaca
300
tcattctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgccccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
480
tcccaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctcacaggat ggtgagtgga ggcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaagg
660
aaaccgggcc gccgga
676

```

&lt;210&gt; 1684

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1684

```

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1      5      10      15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20     25     30
Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
35     40     45
Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
50     55     60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65     70     75     80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
85     90     95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100    105    110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```

115	120	125
Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala		
130	135	140
Thr Arg Pro Leu Thr Arg Ala Leu Ser His		
145	150	

<210> 1685  
 <211> 2740  
 <212> DNA  
 <213> Homo sapiens

<400> 1685  
 ngaggaggag ccggcgggcg ctccggggaa agggaggggg gcgctccgca gccgcccgcg  
 60  
 ccagggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag  
 120  
 ggggcctccc cttctccatc ctctctttct gcgggcaaaa cccaggaac cggcagcaga  
 180  
 aactccggaa gcggcggttg gggggcgggc agcgggtggtg gagggagcta ctggaaagaa  
 240  
 ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg  
 300  
 gcggccgcgc ctcagatgca cgctaagaac ggcggcggca gcagtagccg cagctccccg  
 360  
 gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg  
 420  
 gcggcgggcg agggccccca gcagagcgca gagggcagcg cgagcggcg gggcatgcag  
 480  
 gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg  
 540  
 caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgaatgag  
 600  
 ctgagaaccg agatggacga gatgagggac actttcttcg aggaggatgc ctgtcaactg  
 660  
 caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggaatct gcagtaccgc  
 720  
 ctccgcaaag ccgagcgcaa aaggctccgc tacgcccaga ccggggaaat cgacggggag  
 780  
 ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac  
 840  
 catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg  
 900  
 aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa  
 960  
 atgaaagagt tatccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag  
 1020  
 gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttggt  
 1080  
 aaggaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga  
 1140  
 tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc  
 1200  
 aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg  
 1260

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac  
1320  
agaggcctga aggcggaact ggacgacctt aggggcatg acnnttcaac ggctcggcca  
1380  
accgctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg  
1440  
gtggaagacg agacggagct gctgaggagg aacgtggccg acctggagga gcagaacaag  
1500  
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc  
1560  
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgctg  
1620  
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg  
1680  
tccaacatgc agcgctacga cctggcctcg cacctgggca tccgcggcag ccccgcgac  
1740  
agcgacgccg agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac  
1800  
cgcaagcgcg aaggggcccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc  
1860  
gctgcctcan cgcccactcg ctctttctac cggcgccccg ggccctggcc caagagcttc  
1920  
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgctggg caagaccatc  
1980  
gaccggctca tcgccgacac gagcaccatc atcaccgagg cgcgcatcnt acgtggccaa  
2040  
cggggacctg ttnncggact catggacgag gaggacgacg gcagccgcat cggggagcac  
2100  
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc  
2160  
atcgaccgcc tcgaggtgcc caagtctgcg gacgaccgcg gcgccgagga gccattttcc  
2220  
gtgagtcaga tgttccagcc tatcatttta cttatttctca ttcttgtatt attttcatca  
2280  
ctttcttaca caacaatatt taaacttgtc ttctttttta cactgttttt tgtactgtaa  
2340  
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcacccttc  
2400  
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag  
2460  
actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaattc aataagaagc  
2520  
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa  
2580  
tttttacttc tttttttcat cctgtttgtc tcctcttgat aaataattgg catactgaat  
2640  
ataaaaaatg actacatgct tcataattat ttctcagtag ttcactatta ttattcaaaa  
2700  
gctggacgga cattcacaat ttggtcacat ttccaaaaag  
2740

&lt;210&gt; 1686

&lt;211&gt; 463

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1686

```

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1           5           10           15
Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
          20           25           30
Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
          35           40           45
Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
          50           55           60
Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
65          70          75          80
Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
          85          90          95
Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
          100          105          110
Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
          115          120          125
Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu
          130          135          140
Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
145          150          155          160
Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
          165          170          175
Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
          180          185          190
Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
          195          200          205
Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
          210          215          220
His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
225          230          235          240
Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
          245          250          255
Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
          260          265          270
Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
          275          280          285
Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
          290          295          300
Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
305          310          315          320
Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
          325          330          335
Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
          340          345          350
Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
          355          360          365
Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
          370          375          380
Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
385          390          395          400
Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

				405					410					415					
Leu	Arg	Leu	Arg	Leu	Val	Glu	Glu	Glu	Ala	Asn	Ile	Leu	Gly	Arg	Lys				
				420					425					430					
Ile	Val	Glu	Leu	Glu	Val	Glu	Asn	Arg	Gly	Leu	Lys	Ala	Glu	Leu	Asp				
			435					440						445					
Asp	Leu	Arg	Gly	Asp	Asp	Xaa	Ser	Thr	Ala	Arg	Pro	Thr	Arg	Ser					
	450						455							460					

&lt;210&gt; 1687

&lt;211&gt; 326

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1687

```

gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcgggttcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcaactgcage cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggaccctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

&lt;210&gt; 1688

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1688

Val	His	Thr	Gly	Glu	Arg	Pro	Tyr	Lys	Cys	Pro	His	Cys	Asp	Tyr	Ala				
1				5				10						15					
Gly	Thr	Gln	Ser	Gly	Ser	Leu	Lys	Tyr	His	Leu	Gln	Arg	His	His	Arg				
			20					25					30						
Glu	Gln	Lys	Asn	Ser	Ala	Gly	Ser	Trp	Ala	Ser	Pro	Arg	Thr	Pro	Ala				
		35					40					45							
Thr	Phe	Pro	Ala	Gly	Leu	Thr	Ala	Ala	Ala	Val	Arg	Ser	Gln	Ala	Asn				
	50					55					60								
Ser	Gly	Leu	Ser	His	Leu	Gly	Arg	Gly	His	Cys	Lys	Tyr	Pro	Ala	Ser				
65					70					75					80				
Phe	Glu	Gln	His	Arg	Thr	Arg	Val	Pro											
				85															

&lt;210&gt; 1689

&lt;211&gt; 301

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1689

```

nggggaagcc atggctgctt aaggacaatg cactgtcage tcggtgatgt cttgatttgg
60

```



tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa  
 120  
 ttggcctttt cccagtcctat taagcctaaa caaaccacat cactttacat caggcagatc  
 180  
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaatacaac taaattattg  
 240  
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc  
 300  
 a  
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met	His	Cys	Gln	Leu	Gly	Asp	Val	Leu	Ile	Trp	Ser	Gly	Ile	Leu	His
1			5					10					15		
Leu	Val	Ile	Ala	Asp	Asn	Thr	His	Val	Ala	Pro	Arg	Lys	Lys	Lys	Leu
			20					25					30		
Ala	Phe	Ser	Gln	Ser	Ile	Lys	Pro	Lys	Gln	Thr	Thr	Ser	Leu	Tyr	Ile
		35					40					45			
Arg	Gln	Ile	Met	Trp	Tyr	Gln	Asn	Phe	Pro	Val	Trp	Arg	Thr	Ile	Leu
	50					55					60				
Ile	Lys	Ser	Thr	Lys	Leu	Leu	Pro	Leu	Trp	Leu	Ser	Val	Lys	Glu	His
65					70				75					80	
Asn	Glu	Glu	Asn	Leu	Glu	Pro	Tyr	Leu	Ile	Leu					
			85						90						

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

nacgcgttcc ggtatgccga tgggcgggtg ctgctgggcg tccgccggcg gcgcgggtgag  
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 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc  
 120  
 ttcgaagaat tcaaacgcct ggacagtcac cagaccgcg ccgagaaagg cctgggcctg  
 180  
 ggcctggcga ttgccgacgg cttgtgccgc gtgctcgggc atcgcttgag cgtgcgttcg  
 240  
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc  
 300  
 gcgcctgcca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt  
 360  
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc  
 420  
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtgga ggggtgtgcg  
 480  
 ccg  
 483

<210> 1692  
<211> 161  
<212> PRT  
<213> Homo sapiens

<400> 1692  
Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg  
1 5 10 15  
Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile  
20 25 30  
Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp  
35 40 45  
Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile  
50 55 60  
Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser  
65 70 75 80  
Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg  
85 90 95  
Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro  
100 105 110  
Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu  
115 120 125  
Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro  
130 135 140  
Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg  
145 150 155 160  
Pro

<210> 1693  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 1693  
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60  
cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat  
120  
actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtctgg cgagagtatc  
180  
cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact  
240  
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300  
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<210> 1694  
<211> 110  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 1694

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Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
          35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
 50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
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&lt;210&gt; 1695

&lt;211&gt; 485

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1695

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&lt;210&gt; 1696

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
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Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20           25           30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
          35           40           45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

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65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100              105              110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
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Glu Gly Tyr Leu
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<210> 1697  
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 <212> PRT  
 <213> Homo sapiens

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Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65      70      75      80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85      90      95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100      105

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 <212> DNA  
 <213> Homo sapiens

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 360  
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 Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu  
 35 40 45  
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly  
 50 55 60  
 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr  
 65 70 75 80  
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met  
 85 90 95  
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu  
 100 105 110  
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile  
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 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1701

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 Phe Gln Cys Gln Ile Gln Phe Gly Pro His Asn Glu Gln Lys His Lys  
 245 250 255  
 Ala Gly Phe Leu Asp Leu Lys Asp Phe Leu Pro Lys Glu Tyr Val Lys  
 260 265 270  
 Gln Lys Gly Glu Arg Lys Ile Phe Gln Ala His Lys Asn Cys Gly Gln  
 275 280 285  
 Met Ser Glu Ile Glu Ala Lys Val Arg Tyr Val Lys Leu Ala Arg Ser  
 290 295 300  
 Leu Lys Thr Tyr Gly Val Ser Phe Phe Leu Val Lys Glu Lys Met Lys

305		310		315		320
Gly Lys Asn Lys	Leu Val Pro Arg Leu Leu Gly Ile Thr Lys Glu Cys					
	325			330		335
Val Met Arg Val	Asp Glu Lys Thr Lys Glu Val Ile Gln Glu Trp Asn					
	340			345		350
Leu Thr Asn Ile	Lys Arg Trp Ala Ala Ser Pro Lys Ser Phe Thr Leu					
	355			360		365
Asp Phe Gly Asp	Tyr Gln Asp Gly Tyr Tyr Ser Val Gln Thr Thr Glu					
	370			375		380
Gly Glu Gln Ile	Ala Gln Leu Ile Ala Gly Tyr Ile Asp Ile Ile Leu					
	385			390		400
Lys Lys Lys Lys	Ser Lys Asp His Phe Gly Leu Glu Gly Asp Glu Glu					
	405			410		415
Ser Thr Met Leu	Glu Asp Ser Val Ser Pro Lys Lys Ser Thr Val Leu					
	420			425		430
Gln Gln Gln Tyr	Asn Arg Val Gly Lys Val Glu His Gly Ser Val Ala					
	435			440		445
Leu Pro Ala Ile	Met Arg Ser Gly Ala Ser Gly Pro Glu Asn Phe Gln					
	450			455		460
Val Gly Ser Met	Pro Pro Ala Gln Gln Gln Ile Thr Ser Gly Gln Met					
	465			470		475
His Arg Gly His	Met Pro Pro Leu Thr Ser Ala Gln Gln Ala Leu Thr					
	485			490		495
Gly Thr Ile Asn	Ser Ser Met Gln Ala Val Gln Ala Ala Gln Ala Thr					
	500			505		510
Leu Asp Asp Phe	Asp Thr Leu Pro Pro Leu Gly Gln Asp Ala Ala Ser					
	515			520		525
Lys Ala Trp Arg	Lys Asn Lys Met Asp Glu Ser Lys His Glu Ile His					
	530			535		540
Ser Gln Val Asp	Ala Ile Thr Ala Gly Thr Ala Ser Val Val Asn Leu					
	545			550		555
Thr Ala Gly Asp	Pro Ala Glu Thr Asp Tyr Thr Ala Val Gly Cys Ala					
	565			570		575
Val Thr Thr Ile	Ser Ser Asn Leu Thr Glu Met Ser Arg Gly Val Lys					
	580			585		590
Leu Leu Ala Ala	Leu Leu Glu Asp Glu Gly Gly Ser Gly Arg Pro Leu					
	595			600		605
Leu Gln Ala Ala	Lys Gly Leu Ala Gly Ala Val Ser Glu Leu Leu Arg					
	610			615		620
Ser Ala Gln Pro	Ala Ser Ala Glu Pro Arg Gln Asn Leu Leu Gln Ala					
	625			630		635
Ala Gly Asn Val	Gly Gln Ala Ser Gly Glu Leu Leu Gln Gln Ile Gly					
	645			650		655
Glu Ser Asp Thr	Asp Pro His Phe Gln Asp Ala Leu Met Gln Leu Ala					
	660			665		670
Lys Ala Val Ala	Ser Ala Ala Ala Leu Val Leu Lys Ala Lys Ser					
	675			680		685
Val Ala Gln Arg	Thr Glu Asp Ser Gly Leu Gln Thr Gln Val Ile Ala					
	690			695		700
Ala Ala Thr Gln	Cys Ala Leu Ser Thr Ser Gln Leu Val Ala Cys Thr					
	705			710		715
Lys Val Val Ala	Pro Thr Ile Ser Ser Pro Val Cys Gln Glu Gln Leu					
	725			730		735
Val Glu Ala Gly	Arg Leu Val Ala Lys Ala Val Lys Gly Cys Val Ser					

1351

1170	1175	1180
Leu Ala Gln Val Ala Lys Ala Val Thr Gln Ala Leu Asn Arg Cys Val		
1185	1190	1195
Ser Cys Leu Pro Gly Gln Arg Asp Val Asp Asn Ala Leu Arg Ala Val		1200
	1205	1210
Gly Asp Ala Ser Lys Arg Leu Leu Ser Asp Ser Leu Pro Pro Ser Thr		1215
	1220	1225
Gly Thr Phe Gln Glu Ala Gln Ser Arg Leu Asn Glu Ala Ala Ala Gly		1230
	1235	1240
Leu Asn Gln Ala Ala Thr Glu Leu Val Gln Ala Ser Arg Gly Thr Pro		1245
	1250	1255
Gln Asp Leu Ala Arg Ala Ser Gly Arg Phe Gly Gln Asp Phe Ser Thr		1260
1265	1270	1275
Phe Leu Glu Ala Gly Val Glu Met Ala Gly Gln Ala Pro Ser Gln Glu		1280
	1285	1290
Asp Arg Ala Gln Val Val Ser Asn Leu Lys Gly Ile Ser Met Ser Ser		1295
	1300	1305
Ser Lys Leu Leu Leu Ala Ala Lys Ala Leu Ser Thr Asp Pro Ala Ala		1310
	1315	1320
Pro Asn Leu Lys Ser Gln Leu Ala Ala Ala Ala Arg Ala Val Thr Asp		1325
	1330	1335
Ser Ile Asn Gln Leu Ile Thr Met Cys Thr Gln Gln Ala Pro Gly Gln		1340
1345	1350	1355
Lys Glu Cys Asp Asn Ala Leu Arg Glu Leu Glu Thr Val Arg Glu Leu		1360
	1365	1370
Leu Glu Asn Pro Val Gln Pro Ile Asn Asp Met Ser Tyr Phe Gly Cys		1375
	1380	1385
Leu Asp Ser Val Met Glu Asn Ser Lys Val Leu Gly Glu Ala Met Thr		1390
	1395	1400
Gly Ile Ser Gln Asn Ala Lys Asn Gly Asn Leu Pro Glu Phe Gly Asp		1405
	1410	1415
Ala Ile Ser Thr Ala Ser Lys Ala Leu Cys Gly Phe Thr Glu Ala Ala		1420
1425	1430	1435
Ala Gln Ala Ala Tyr Leu Val Gly Val Ser Asp Pro Asn Ser Gln Ala		1440
	1445	1450
Gly Gln Gln Gly Leu Val Glu Pro Thr Gln Phe Ala Arg Ala Asn Gln		1455
	1460	1465
Ala Ile Gln Met Ala Cys Gln Ser Leu Gly Glu Pro Gly Cys Thr Gln		1470
	1475	1480
Ala Gln Val Leu Ser Ala Ala Thr Ile Val Ala Lys His Thr Ser Ala		1485
	1490	1495
Leu Cys Asn Ser Cys Arg Leu Ala Ser Ala Arg Thr Thr Asn Pro Thr		1500
1505	1510	1515
Ala Lys Arg Gln Phe Val Gln Ser Ala Lys Glu Val Ala Asn Ser Thr		1520
	1525	1530
Ala Asn Leu Val Lys Thr Ile Lys Ala Leu Asp Gly Ala Phe Thr Glu		1535
	1540	1545
Glu Asn Arg Ala Gln Cys Arg Ala Ala Thr Ala Pro Leu Leu Glu Ala		1550
	1555	1560
Val Asp Asn Leu Ser Ala Phe Ala Ser Asn Pro Glu Phe Ser Ser Ile		1565
	1570	1575
Pro Ala Gln Ile Ser Pro Glu Gly Arg Ala Ala Met Glu Pro Ile Val		1580
1585	1590	1595
Ile Ser Ala Lys Thr Met Leu Glu Ser Ala Gly Gly Leu Ile Gln Thr		1600

1353

2035	2040	2045
Gln Ser Ser Val Ala Thr Ile Thr Arg Leu Ala Asp Val Val Lys Leu		
2050	2055	2060
Gly Ala Ala Ser Leu Gly Ala Glu Asp Pro Glu Thr Gln Val Val Leu		
2065	2070	2075
Ile Asn Ala Val Lys Asp Val Ala Lys Ala Leu Gly Asp Leu Ile Ser		2080
2085	2090	2095
Ala Thr Lys Ala Ala Ala Gly Lys Val Gly Asp Asp Pro Ala Val Trp		
2100	2105	2110
Gln Leu Lys Asn Ser Ala Lys Val Met Val Thr Asn Val Thr Ser Leu		
2115	2120	2125
Leu Lys Thr Val Lys Ala Val Glu Asp Glu Ala Thr Lys Gly Thr Arg		
2130	2135	2140
Ala Leu Glu Ala Thr Thr Glu His Ile Arg Gln Glu Leu Ala Val Phe		
2145	2150	2155
Cys Ser Pro Glu Pro Pro Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile		2160
2165	2170	2175
Arg Met Thr Lys Gly Ile Thr Met Ala Thr Ala Lys Ala Val Ala Ala		
2180	2185	2190
Gly Asn Ser Cys Arg Gln Glu Asp Val Ile Ala Thr Ala Asn Leu Ser		
2195	2200	2205
Arg Arg Ala Ile Ala Asp Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr		
2210	2215	2220
His Pro Glu Val Ala Pro Asp Val Arg Leu Arg Ala Leu His Tyr Gly		
2225	2230	2235
Arg Glu Cys Ala Asn Gly Tyr Leu Glu Leu Leu Asp His Val Leu Leu		
2245	2250	2255
Thr Leu Gln Lys Pro Ser Pro Glu Leu Lys Gln Gln Leu Thr Gly His		
2260	2265	2270
Ser Lys Arg Val Ala Gly Ser Val Thr Glu Leu Ile Gln Ala Ala Glu		
2275	2280	2285
Ala Met Lys Gly Thr Glu Trp Val Asp Pro Glu Asp Pro Thr Val Ile		
2290	2295	2300
Ala Glu Asn Glu Leu Leu Gly Ala Ala Ala Ala Ile Glu Ala Ala Ala		
2305	2310	2315
Lys Lys Leu Glu Gln Leu Lys Pro Arg Ala Lys Pro Lys Glu Ala Asp		
2325	2330	2335
Glu Ser Leu Asn Phe Glu Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile		
2340	2345	2350
Ala Ala Ala Thr Ser Ala Leu Val Lys Ala Ala Ser Ala Ala Gln Arg		
2355	2360	2365
Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu		
2370	2375	2380
Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val		
2385	2390	2395
Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln		
2405	2410	2415
Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala		
2420	2425	2430
Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln		
2435	2440	2445
Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys		
2450	2455	2460
Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Phe		



2465                      2470                      2475                      2480  
 Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly  
                                  2485                      2490                      2495  
 Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu  
                                  2500                      2505                      2510  
 Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln  
                                  2515                      2520                      2525  
 Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His  
                                  2530                      2535                      2540

<210> 1703  
 <211> 346  
 <212> DNA  
 <213> Homo sapiens

<400> 1703  
 ggatcccgag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta  
 60  
 ggaatctgtg atggagaaga atgactcctc ttcttctctg agtctctgag taatgcattc  
 120  
 tctgctctac cttcttccat gactgctgcc tggctgtgcc tagccttgct ctgatccaca  
 180  
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg  
 240  
 gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg  
 300  
 tgaatgactg tgccatccat ggccaccaag ttccctttct ctcgct  
 346

<210> 1704  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 1704  
 Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg  
   1                                  5                                  10                                  15  
 His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala  
                                   20                                  25                                  30  
 Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val  
                                   35                                  40                                  45  
 Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly  
                                   50                                  55                                  60  
 Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His  
   65                                  70                                  75                                  80  
 Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His  
                                   85                                  90                                  95  
 Glu Val Thr Glu Asp Phe Ser Pro Arg Asp  
                                   100                                  105

<210> 1705  
 <211> 377  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1705

gtgcaccttt tctcaggact cgctcagaag gtccttctgg gaggacaatg gacaagacta  
60  
aaccatcaaa tccattctca atgggtcaaa ttccaaattt tcttgaaggg ctggcttcta  
120  
ctgggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagttaa tttaatcctg  
180  
gttttggttg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc  
240  
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag  
300  
cttttaactc tgcccctgca ccacagatgg aatttcccac agttcctcca tacaaccctc  
360  
cttccttcgg agctagc  
377

&lt;210&gt; 1706

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
		35					40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
	50					55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
				85					90					95	
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105					110		

&lt;210&gt; 1707

&lt;211&gt; 427

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1707

nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc  
60  
catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcga  
120  
gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga  
180  
gtcatccttg cgggtggtca accttccttc aaggaggacg acctagctct gctggagtgg  
240  
taccgcacca ccctggagga gttgggctg gagattcgac tcaacaccac cgtaacggct  
300

gatcttatacg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggccgcgt  
 360  
 cgactcgacc taggtgatga tgccaaggtc attgacgcca ccgacgctct gctcaaccgc  
 420  
 gacgcgt  
 427

<210> 1708  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1708  
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg  
 1 5 10 15  
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly  
 20 25 30  
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu  
 35 40 45  
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala  
 50 55 60  
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp  
 65 70 75 80  
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr  
 85 90 95  
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val  
 100 105 110  
 Leu Ala Thr Gly Ser Arg Pro Arg Leu Asp Leu Gly Asp Asp Ala  
 115 120 125  
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala  
 130 135 140

<210> 1709  
 <211> 446  
 <212> DNA  
 <213> Homo sapiens

<400> 1709  
 acgcgtgaag gggaccagga gggtggacac agaccattgc aatggaaatg atgatttaga  
 60  
 ctgttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac  
 120  
 ctcctcttcc agccacatca tatctcagcc tcctggagga aactcccata gcttgtctct  
 180  
 tcagtcctcag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac  
 240  
 cagggtgttg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc  
 300  
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat  
 360  
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac  
 420  
 tgctgtgct cggtttgtca aaattt  
 446

<210> 1710  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 1710  
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser  
 1 5 10 15  
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu  
 20 25 30  
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr  
 35 40 45  
 Arg Leu Leu Gln Glu Val Phe Gln Ala Ile Leu Leu Ala Val Cys  
 50 55 60  
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala  
 65 70 75 80  
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser  
 85 90 95  
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg  
 100 105 110  
 Phe Val Lys Ile  
 115

<210> 1711  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 1711  
 ngggggattc atgttagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag  
 60  
 cactagaaca tgaacagggga aagcagagga aatacttgta gaaagtattt ttacagctc  
 120  
 cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc  
 180  
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca  
 240  
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgctca cgcacctttt  
 300  
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct  
 360  
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat  
 420  
 ggatat  
 426

<210> 1712  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1712  
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1             5             10             15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20             25             30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35             40             45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50             55             60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65             70             75
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85             90             95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100            105            110
Glu Gly Pro Gln Asp Gly Tyr
      115

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<210> 1713  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1713
tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggctcatgatg aggtcagctt tggaggagca gggccagcgt gtcctgcttt ctgctcctgg
180
aatgagcctc actccctccc tgetcaaggc agcccttcac ccagccgccg ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcattctg gctgggtgact cctggggg
328

```

<210> 1714  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1714
Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1             5             10             15
Leu Ala Leu Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20             25             30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35             40             45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50             55             60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65             70             75             80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85             90             95
Ser Gly Trp

```

<210> 1715  
<211> 489  
<212> DNA  
<213> Homo sapiens

<400> 1715  
gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa  
60  
gatgccccat gtgtgacatt ctgtggatag ttattgttag cattatttga caagttctag  
120  
aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag  
180  
ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt  
240  
aatatggtgt tttttggcca actcgggaagc cgggggtgtcg ggggaagtcgg tccctgtaag  
300  
gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctcg ccaagggttcg  
360  
aactcattac cgtcgaatac gacgctgtcg ccatcggcgg tgtcgaatcg aatcctcaaa  
420  
gtgtatccgt actcgggtgc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca  
480  
ctgacgcgt  
489

<210> 1716  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 1716  
Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile  
1 5 10 15  
His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly  
20 25 30  
Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys  
35 40 45  
Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn  
50 55 60  
Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr  
65 70 75 80  
Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly  
85 90 95  
Cys Ala Leu Thr Arg  
100

<210> 1717  
<211> 312  
<212> DNA  
<213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga  
 60  
 gaggtttctg gtttcaagaa ggcacactga gtcctgcac ccgatgcctc tccttcccca  
 120  
 aatcccactg gaatacacag agagacataa aaacaaggag tgtcctgtag cagagcagcc  
 180  
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg  
 240  
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc  
 300  
 catgaatgtg tc  
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5				10						15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70					75				80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85				90						95	
Leu	Arg	Cys	Met	Pro											
				100											

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgcc a ttttttgtcg ggaccgcaga ccgtatgctg cccctcgaag  
 60  
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggg  
 120  
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg  
 180  
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta  
 240  
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt  
 300  
 cccagcagag ccacgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga  
 360  
 ttcgagcagg gagcaccat tggtngtgg tgtccccggg ggtt  
 404

<210> 1720  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 1720  
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met  
 1 5 10 15  
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln  
 20 25 30  
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys  
 35 40 45  
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp  
 50 55 60  
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr  
 65 70 75 80  
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr  
 85 90 95  
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His  
 100 105 110  
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp  
 115 120 125

<210> 1721  
 <211> 529  
 <212> DNA  
 <213> Homo sapiens

<400> 1721  
 ccattggccac ccttttcagga cagagctgcc cttcccatgc tggaggagcc acagggcctg  
 60  
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca  
 120  
 ggcactccct gcttggatca ggggatctgg gtttcattct cccagctcct cctgtcctct  
 180  
 gctgggcacc tgtgatgtcc aggcactccc tgcttggatt gggggatctg ggtttcattct  
 240  
 tccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat  
 300  
 cggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac  
 360  
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac  
 420  
 cctgtgactc tgcttcgggt gttgtcaa at gggggtcac ccaggaccg caccactggg  
 480  
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggacgcgt  
 529

<210> 1722  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens



&lt;400&gt; 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Pro Ser
          115

```

&lt;210&gt; 1723

&lt;211&gt; 371

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgcca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggtgtgc aatggtgcc aatctcccg ttagttgttg aatggcagtg
180
gcaaagttag gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgcccgagg tggcttctct ttgctggccg ccggctgtct tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggtgatcgc
360
tgcattcaat a
371

```

&lt;210&gt; 1724

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85					90						95	
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
		100						105					110		

<210> 1725  
 <211> 807  
 <212> DNA  
 <213> Homo sapiens

<400> 1725  
 ngtgcacctg gtatgggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg  
 60  
 atttgaagtg acctcttccc tctgagcctt ctggtgtcca actctcccct tctctaggac  
 120  
 catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg  
 180  
 gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag  
 240  
 gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg  
 300  
 gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagagct  
 360  
 agtgctggag atactcgcca ggttgagggt ctcaagaagg agctgctccg gacacaggag  
 420  
 gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggag acaccgggac  
 480  
 cgggagttgg agaagcagct ggcggtcctg agggtcgagg ctgatcgagg tcgggagctg  
 540  
 gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag  
 600  
 gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggac  
 660  
 gcagtggaga cgacgcttcg ggagacccag gaggaatatg acgaattccg ccggcgcctc  
 720  
 ctgggtttgg agcagcagct gaaggagact cgaggtcttg tggatggtgg ggaagcgggtg  
 780  
 gaggcacgac tacgggacaa gctgcag  
 807

<210> 1726  
 <211> 230  
 <212> PRT  
 <213> Homo sapiens

<400> 1726  
 Asp His Ala Val Leu Glu Ala Glu Arg Gln Lys Met Ser Ala Leu Val  
 1 5 10 15  
 Arg Gly Leu Gln Arg Glu Leu Glu Thr Ser Glu Glu Thr Gly His  
 20 25 30  
 Trp Gln Ser Met Phe Gln Lys Asn Lys Glu Asp Leu Arg Ala Thr Lys  
 35 40 45  
 Gln Glu Leu Leu Gln Leu Arg Met Glu Lys Glu Glu Met Glu Glu Glu

50	55	60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg		
65	70	75
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu		80
	85	90
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser		95
	100	105
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu		110
	115	120
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln		125
	130	135
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu		140
145	150	155
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu		160
	165	170
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu		175
	180	185
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu		190
	195	200
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg		205
	210	215
Leu Arg Asp Lys Leu Gln		220
225	230	

&lt;210&gt; 1727

&lt;211&gt; 474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1727

```

aaccaactct ccacaacatc gccagaaaca gtcgctgcca agaggctcca ccatgtttta
60
gcagcttcag aagacaaaaga taagatgaaa aaggaagttt tacaaagctc aagggaacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtatct ggagcagttg cacttgcccc aaagcaaacc aatttcccca
240
aatttcaaag ttaaaaccat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

&lt;210&gt; 1728

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115          120          125
Gln Leu
      130

```

<210> 1729  
 <211> 470  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1729
acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaacccggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggtcac
240
aaccgatca cgaaaagagt cggcgcaaaa ctgcggtcg aggttacga agatctgtca
300
nngccccccg acccgctac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgacccacca agaaggatcg tcgcgagatc gatcggtcc gaggcggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcg cgaattggc
470

```

<210> 1730  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1730
His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

&lt;210&gt; 1731

&lt;211&gt; 534

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1731

```

agcgctccct gcctgctgct gggcggaggg aaggcggcaa gagctgcgga gcccctggaa
60
gagcttccag gaacctgctg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tctgacctc tctgtcccgt
180
ccctgcccga gtctcaccat ggccttcttg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggtccag ctcttggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcttggtggc tgttcgccac tcccaccgc cctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca ggggtctcatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccgg ctgctacgct ggagagagggc tgga
534

```

&lt;210&gt; 1732

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

	85		90		95
Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly					
100		105		110	

<210> 1733  
 <211> 409  
 <212> DNA  
 <213> Homo sapiens

<400> 1733  
 acgcgtgatg gccgatccga ctgtgcccgg tcacgaccgg cggcgtccga gtcctgaccc  
 60  
 ggacatgccg tggctgatcc gcgacatcac cctcggcaac aacgtgatcg cgggcagcac  
 120  
 gggcaactgc accctctgcg tcgaggacta ctcgcgcagg tacgcggcga ggatcctcaa  
 180  
 catcgtctcc gacggcaacg tctgcagcg cgcacggcc gcacagccag cgtggctggt  
 240  
 tgggtgtggc gcggggatca gcgaactccg atccgtacgt attctccagc ctcgacgctt  
 300  
 accgggcgac cactgggttt taggaccttc gctcgggtctc gatcgatggc gtgctgtcac  
 360  
 cgcggccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg  
 409

<210> 1734  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 1734  
 Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro  
 1 5 10 15  
 Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn  
 20 25 30  
 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr  
 35 40 45  
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn  
 50 55 60  
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val  
 65 70 75 80  
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg  
 85 90 95  
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp  
 100 105 110  
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp  
 115 120 125  
 Leu Lys Ala Val Thr Arg  
 130

<210> 1735  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1735

ggcgccatgg tcatcagcat catgtgttcg ggcggcgctg cacgaatgtt cgtgcgatca  
60  
agcgcgccctt ttagttcgac gcacggtaaa gcccggtgcgc atcgatgtag gccaggaccg  
120  
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg  
180  
cggacaccgc aagcgggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg  
240  
ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcgggttcgc  
300  
tggcggtatc cgggcgttgc aaaaccagga tgtggcaatg ct  
342

&lt;210&gt; 1736

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
		20						25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
		35					40					45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50					55					60				
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65					70					75				80	
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
				85					90				95		
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105					110		

&lt;210&gt; 1737

&lt;211&gt; 506

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1737

acgcgtgttc accatgacct ggaccgcca gcggcccgac gggtcgagcg cggaggagtc  
60  
ggacgagacg actgtggtgg tccttgccat ctcagcgccc cacgggtacg acgtgcaggc  
120  
gtccggcgcc cacgtcacct cccaccagg cgaccgggtg gcgcgggttc acctcaacca  
180  
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca  
240  
ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg  
300  
tccttttcgt gtcgtgggat gcacctggca gcaccacctc cggcccccat ggagaacagt  
360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc  
420  
gtcttagggc catactgccg ccacgcagct gagacgggtga ccaatcgggt aagggtgactg  
480  
gttgccgtag tccatgcgag gccggc  
506

<210> 1738  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 1738  
Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu  
1 5 10 15  
Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu  
20 25 30  
Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr  
35 40 45  
Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser  
50 55 60  
Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg  
65 70 75 80  
Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp  
85 90 95  
Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly  
100 105 110  
Arg

<210> 1739  
<211> 420  
<212> DNA  
<213> Homo sapiens

<400> 1739  
cgcggttattg aaaatgctgc ttttttttact aaattaggac agcgtttaat cggcgcat  
60  
catcaagtga cggttgatgg atttggttac cgtggtgata tgcggttacg cccttttgg  
120  
gagtcctgggc cattgggttag cacgtttaat tcaatagagg actattatca aacccatggt  
180  
cgagagtggg agtggttatgc catggttaaa gcccggtgta ttggtggtga ggacgagtat  
240  
aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc  
300  
gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg  
360  
ttaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtggctcaa  
420

<210> 1740  
<211> 140  
<212> PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1             5             10             15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
          20             25             30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35             40             45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50             55             60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
65             70             75             80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
          85             90             95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
          100             105             110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
          115             120             125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130             135             140

```

&lt;210&gt; 1741

&lt;211&gt; 378

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1741

```

nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
60
gggcaggtcg acgtcgtcgt ctccaaccgc ccctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gcccacggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgtctc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccgc gctggtag
378

```

&lt;210&gt; 1742

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1             5             10             15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
          20             25             30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

35                      40                      45  
 Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly  
 50                      55

<210> 1743

<211> 4121

<212> DNA

<213> Homo sapiens

<400> 1743

atcacgtaca actgcaagga ggagttccag atccatgatg agctgctcaa ggctcattac  
 60  
 acgttggggcc ggctctcggga caacacccct gagcactacc tgggtgcaagg ccgctacttc  
 120  
 ctgggtgcggg atgtcactga gaagatggat gtgctgggca ccgtgggaag ctgtggggcc  
 180  
 cccaacttcc ggcaggtgca ggggtgggctc actgtgttcg gcatgggaca gccagcctc  
 240  
 tcagggttca ggcgggtcct ccagaaactc cagaaggacg gacataggga gtgtgtcatc  
 300  
 ttctgtgtgc gggaggaacc tgtgcttttc ctgctgcag atgaggactt tgtgtcctac  
 360  
 acacctcgag acaagcagaa cttcatgag aacctccagg gccttggacc cggggtcagg  
 420  
 gtggagagcc tggagctggc catccgaaa gagatccacg actttgcccc gctgagcgag  
 480  
 aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgctgtggcc  
 540  
 atccatggtg aggacgactt gcatgtgacg gaggaggtgt acaagcggcc cctcttcctg  
 600  
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&lt;210&gt; 1744

&lt;211&gt; 796

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1744

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Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20					25					30		
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Gln	Val	Gln	Gly	Gly	Leu	Thr	Val	Phe	Gly	Met	Gly	Gln	Pro	Ser	Leu		
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Ser	Gly	Phe	Arg	Arg	Val	Leu	Gln	Lys	Leu	Gln	Lys	Asp	Gly	His	Arg		
				85					90					95			
Glu	Cys	Val	Ile	Phe	Cys	Val	Arg	Glu	Glu	Pro	Val	Leu	Phe	Leu	Arg		
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Ala	Asp	Glu	Asp	Phe	Val	Ser	Tyr	Thr	Pro	Arg	Asp	Lys	Gln	Asn	Leu		
		115					120					125					
His	Glu	Asn	Leu	Gln	Gly	Leu	Gly	Pro	Gly	Val	Arg	Val	Glu	Ser	Leu		
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Glu	Leu	Ala	Ile	Arg	Lys	Glu	Ile	His	Asp	Phe	Ala	Gln	Leu	Ser	Glu		
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His	Ala	Val	Ala	Ile	His	Gly	Glu	Asp	Leu	His	Val	Thr	Glu	Glu			
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Val	Tyr	Lys	Arg	Pro	Leu	Phe	Leu	Gln	Pro	Thr	Tyr	Arg	Tyr	His	Arg		
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Leu	Pro	Leu	Pro	Glu	Gln	Gly	Ser	Pro	Leu	Glu	Ala	Gln	Leu	Asp	Ala		
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Phe	Val	Ser	Val	Leu	Arg	Glu	Thr	Pro	Ser	Leu	Leu	Gln	Leu	Arg	Asp		
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Ala	His	Gly	Pro	Pro	Pro	Ala	Leu	Val	Phe	Ser	Cys	Gln	Met	Gly	Val		
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			260					265					270				
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Pro	Leu	Pro	Met	Glu	Gln	Phe	Gln	Val	Ile	Gln	Ser	Phe	Leu	Arg	Met		
	290					295					300						
Val	Pro	Gln	Gly	Arg	Arg	Met	Val	Glu	Glu	Val	Asp	Arg	Ala	Ile	Thr		
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Ala	Cys	Ala	Glu	Leu	His	Asp	Leu	Lys	Glu	Val	Val	Leu	Glu	Asn	Gln		
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Lys	Lys	Leu	Glu	Gly	Ile	Arg	Pro	Glu	Ser	Pro	Ala	Gln	Gly	Ser	Gly		
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Ser	Arg	His	Ser	Val	Trp	Gln	Arg	Ala	Leu	Trp	Ser	Leu	Glu	Arg	Tyr		
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Phe	Tyr	Leu	Ile	Leu	Phe	Asn	Tyr	Tyr	Leu	His	Glu	Gln	Tyr	Pro	Leu		
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Ala	Phe	Ala	Leu	Ser	Phe	Ser	Arg	Trp	Leu	Cys	Ala	His	Pro	Glu	Leu		
385					390					395					400		
Tyr	Arg	Leu	Pro	Val	Thr	Leu	Ser	Ser	Ala	Gly	Pro	Val	Ala	Pro	Arg		
				405					410					415			
Asp	Leu	Ile	Ala	Arg	Gly	Ser	Leu	Arg	Glu	Asp	Asp	Leu	Val	Ser	Pro		
		420						425					430				
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Val	Pro	Arg	Met	Pro	Ile	Tyr	Gly	Thr	Ala	Gln	Pro	Ser	Ala	Lys	Ala		
	450					455					460						
Leu	Gly	Ser	Ile	Leu	Ala	Tyr	Leu	Thr	Asp	Ala	Lys	Arg	Arg	Leu	Arg		
465					470				475						480		
Lys	Val	Val	Trp	Val	Ser	Leu	Arg	Glu	Glu	Ala	Val	Leu	Glu	Cys	Asp		

485 490 495  
 Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp  
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 515 520 525  
 Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu  
 530 535 540  
 Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu  
 545 550 555 560  
 Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu  
 565 570 575  
 Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp  
 580 585 590  
 Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr  
 595 600 605  
 Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly  
 610 615 620  
 Phe Pro Glu Val Gly Glu Glu Glu Leu Val Ser Val Pro Asp Ala Lys  
 625 630 635 640  
 Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu  
 645 650 655  
 Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr  
 660 665 670  
 Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile  
 675 680 685  
 Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met  
 690 695 700  
 Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys  
 705 710 715 720  
 Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp  
 725 730 735  
 Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly  
 740 745 750  
 Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly  
 755 760 765  
 Glu Asp Gln Pro Phe Ser Arg Leu Arg Tyr Arg Trp Gln Glu Gln Ser  
 770 775 780  
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 785 790 795

&lt;210&gt; 1745

&lt;211&gt; 426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1745

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<210> 1746  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 1746  
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 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu  
 35 40 45  
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile  
 50 55 60  
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala  
 65 70 75 80  
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe  
 85 90 95  
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala  
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<210> 1747  
 <211> 373  
 <212> DNA  
 <213> Homo sapiens

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 240  
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<210> 1748  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1748  
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 1 5 10 15  
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 20 25 30  
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His  
 35 40 45  
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp  
 50 55 60  
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val  
 65 70 75 80  
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly  
 85 90 95  
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr  
 100 105 110  
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<210> 1749  
 <211> 853  
 <212> DNA  
 <213> Homo sapiens

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<210> 1750

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1750

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		20					25					30			
Gly	Ile	Ala	Cys	Gly	Pro	Leu	Asn	Ser	Trp	Gly	Ser	Gly	Arg	Asn	Pro
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Ser	Leu	Pro	Glu	Ala	Leu	Met	Ser	Pro	Tyr	Val	Pro	Gly	Thr	Gly	Ala
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<210> 1751

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1751

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<210> 1752

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1752

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			20					25					30				
Gly	Val	Ser	Glu	Leu	Thr	Asp	Arg	Ala	Trp	Ser	Ser	Leu	Ser	Gly	Gly		
		35				40						45					
Glu	Arg	Gln	Arg	Val	Gln	Leu	Ala	Arg	Ala	Leu	Ala	Gln	Glu	Pro	Glu		
	50				55						60						
Ile	Leu	Phe	Leu	Asp	Glu	Pro	Thr	Asn	His	Leu	Asp	Leu	Pro	His	Gln		
65				70					75					80			
Ile	Asp	Leu	Leu	Glu	Arg	Val	Arg	Gly	Leu	Gly	Leu	Thr	Thr	Val	Thr		
			85					90						95			
Val	Ile	His	Asp	Leu	Asp	Leu	Ala	Ala	Ala	Tyr	Ala	Asp	Asp	Leu	Ile		
		100					105						110				
Val	Leu	Asp	Ser	Gly	Arg	Met	Val	Ala	Gly	Gly	Pro	Ala	Ser	Thr	Val		
	115						120					125					
Leu	Thr	Pro	Gly	Leu	Val	Arg	Asp	His	Phe	Gly	Val	Asp	Gly	Glu	Val		
	130					135					140						
Trp	Ser	Ser	Ser	Arg	Arg	Gly	Phe	Thr	Trp	Asn	Gly	Leu	Gln	Thr			
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&lt;210&gt; 1753

&lt;211&gt; 920

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1753

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720  
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780  
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840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata  
 900  
 aagtacagag atatgccgag  
 920

<210> 1754  
 <211> 210  
 <212> PRT  
 <213> Homo sapiens

<400> 1754  
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val  
 1 5 10 15  
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu  
 20 25 30  
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys  
 35 40 45  
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg  
 50 55 60  
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp  
 65 70 75 80  
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser  
 85 90 95  
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser  
 100 105 110  
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu  
 115 120 125  
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg  
 130 135 140  
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu  
 145 150 155 160  
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr  
 165 170 175  
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln  
 180 185 190  
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln  
 195 200 205  
 Glu Gly  
 210

<210> 1755  
 <211> 437  
 <212> DNA  
 <213> Homo sapiens

<400> 1755  
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgc tggagtcag  
 60  
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag  
 120  
 ttggttgtga cagatcttct accaacaatg ccttgtactt gcttgcaaat agttgtagat  
 180  
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaatagg  
 240

ttattgtgga atatttcaga ttattttttc caaagagggg aaactattga aaaagaacta  
 300  
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagttgt tttaaactcg  
 360  
 ccattccacc ctgcaccgcc atttgattgc ttgtgggttat gtctttatgc aaaattgggt  
 420  
 gaactatgtg tggatcc  
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1				5				10					15		
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25					30		
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
			35				40					45			
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50				55					60					
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85					90						95	
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
			100					105					110		
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
		115					120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat  
 60  
 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga  
 120  
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc  
 180  
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca  
 240  
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta  
 300  
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg  
 360  
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga  
 420  
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt  
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc  
 540  
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg  
 600  
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc  
 660  
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca  
 720  
 ctgctgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg  
 780  
 agaagcccc cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc  
 840  
 aggtcccgag atcggcggca cagatcccgt tccaagtccc caggatcatca ccgtagtcac  
 900  
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg  
 960  
 agagggaaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa  
 1020  
 ggatatctgt atgtggaagg attaagatct ccccaggca gctataagaa tatttttagtt  
 1080  
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc  
 1140  
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta  
 1200  
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc  
 1260  
 tgatgacctt ttcccttttt attaaaccgg acacacc  
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5					10					15	
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
			35				40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
				85					90					95	
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
			100					105						110	
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
		115					120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130					135					140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

```

145          150          155          160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
          165          170          175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
          180          185          190
Ser Ser Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
          195          200          205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
          210          215          220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
225          230          235          240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
          245          250          255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
          260          265          270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
          275          280          285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
          290          295          300
Lys Lys Ser Arg Arg Gly Asn Glu
305          310

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<210> 1759  
<211> 324  
<212> DNA  
<213> Homo sapiens

```

<400> 1759
aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
60
ggcctggggca gacacaatta ttgtcggaat ccagatggtg atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

```

<210> 1760  
<211> 108  
<212> PRT  
<213> Homo sapiens

```

<400> 1760
Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
1          5          10          15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
          20          25          30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
          35          40          45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

```

<210> 1761  
 <211> 351  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1761
ngcgatctcg gctcactaca acctcggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttgggggagca tcctctgaat atataaaggc
120
agccattcat ttagggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgc gtaagacccc
240
acagtggggc caggtggtct tgcacctgt attcccactt tggctggggc agcccagagt
300
ccagccagc aggtaatgcc ccagccatgc cactcggtc ctattggatc c
351

```

<210> 1762  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

<210> 1763  
 <211> 356  
 <212> DNA  
 <213> Homo sapiens

<400> 1763

gcgcgccggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag  
 60  
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagaccttcc  
 120  
 accatccccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag  
 180  
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc  
 240  
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg  
 300  
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt  
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1				5					10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
				85				90					95		
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cgcccgcatc cttcgtgact ggcgtcccgc cgccgggtgca aaagtgtcag gaaataccag  
 60  
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag  
 120  
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg  
 180  
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcgggc  
 240  
 tgctgaggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac  
 300  
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg  
 357



<210> 1766  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1766  
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala  
 1 5 10 15  
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr  
 20 25 30  
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala  
 35 40 45  
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser  
 50 55 60  
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln  
 65 70 75 80  
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu  
 85 90 95  
 Leu Ile

<210> 1767  
 <211> 297  
 <212> DNA  
 <213> Homo sapiens

<400> 1767  
 nnnccgacgac ggccgcatg acgcaccgca ttgacgtgaa ccagggcgac gatgccaacc  
 60  
 ccggccaaca cgccaggctg cttgacgccg ccagccaacc cgacgaacgc cccaccaaga  
 120  
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg  
 180  
 agggacaaaac ccacctggag tccgtcgttg tgcattgcccc ccaccacgct caacgtcgct  
 240  
 aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn  
 297

<210> 1768  
 <211> 73  
 <212> PRT  
 <213> Homo sapiens

<400> 1768  
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn  
 1 5 10 15  
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile  
 20 25 30  
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr  
 35 40 45  
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn  
 50 55 60  
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 1769  
 caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg  
 60  
 cagggtcatg ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag  
 120  
 accgttgaga tcctccatac tcccgcgacc acgcatcgat gggtcgccgt ccaggcattg  
 180  
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa  
 240  
 atcctcgcct ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag  
 300  
 ggcgtcgcga ggtggcaagc ggctgcccgt gaggccacca aacagtctcg acgttttctt  
 360  
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgccag  
 420  
 gccgcctacg ttttgcacga gtcggccagt gaaccgctgg tgcacagga gctc  
 474

<210> 1770  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 1770  
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu  
 1 5 10 15  
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val  
 20 25 30  
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro  
 35 40 45  
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp  
 50 55 60  
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu  
 65 70 75 80  
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp  
 85 90 95  
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala  
 100 105 110  
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln  
 115 120 125  
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val  
 130 135 140  
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu  
 145 150 155

<210> 1771  
 <211> 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat  
60  
taataacagc ggggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag  
120  
caacaggctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt  
180  
acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata  
240  
cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac  
287

&lt;210&gt; 1772

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10					15		
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55				60					
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65				70				75						80	
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
				85				90							

&lt;210&gt; 1773

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1773

accggtgagt tctacgtccc ggttaaccac ctcggagggtg aacaggcgca cctcgacgtc  
60  
ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc  
120  
cgtccggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cgggtgcccg  
180  
acgatcatcg atgagttcat cgctcggct ggctccaagt ggggtcagaa gtcgggagtc  
240  
gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg  
300  
gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg  
360  
gcaagctaca gccatttatt gcgtcagcac gcg  
393

<210> 1774  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 1774  
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala  
 1 5 10 15  
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly  
 20 25 30  
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp  
 35 40 45  
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp  
 50 55 60  
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val  
 65 70 75 80  
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser  
 85 90 95  
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu  
 100 105 110  
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg  
 115 120 125  
 Gln His Ala  
 130

<210> 1775  
 <211> 369  
 <212> DNA  
 <213> Homo sapiens

<400> 1775  
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa  
 60  
 cgggaggggca tcgctagggga ggggtggggc ggcccggcctt cgatgcagcc atgtgggagg  
 120  
 gccactctca gagaccccc gccttccttg ccacccccac cccagagggg aagctggagc  
 180  
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggctttga  
 240  
 gcatectgct tcctggccac ccagctcttg ggctgctgtc aactcttgat ttgtagacat  
 300  
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg  
 360  
 aacaccggt  
 369

<210> 1776  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 1776  
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

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      1           5           10           15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20           25           30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35           40           45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50           55

```

&lt;210&gt; 1777

&lt;211&gt; 370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1777

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agcttcttat cactatcctt tagtgctttt tgggtctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcatctatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

&lt;210&gt; 1778

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1778

```

Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
      1           5           10           15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20           25           30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35           40           45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50           55           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Pro Tyr Phe Ser
      65           70           75           80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85           90           95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100          105          110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115          120

```

&lt;210&gt; 1779

&lt;211&gt; 345

<212> DNA

<213> Homo sapiens

<400> 1779

ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt  
60  
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg  
120  
gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtaggt gtgtatatct  
180  
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac  
240  
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat gngnggtgtgt atgtacatgt  
300  
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg  
345

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

Pro	Cys	Val	Cys	Ile	Cys	Ser	Cys	Val	Met	Val	Cys	Ile	Cys	Val	Tyr
1				5					10					15	
Val	Xaa	Ile	Cys	Ile	His	Val	Cys	Tyr	Gly	Val	Tyr	Ile	Cys	Ile	Tyr
			20					25					30		
Val	Cys	Val	Tyr	Ile	Cys	Ile	Trp	Val	Cys	Val	Cys	Met	Cys	Val	Trp
		35					40					45			
Val	Cys	Ile	Cys	Val	Tyr	Met									
	50					55									

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

nacgcgtcat gctaaatddd gccctttatg gcaacatddd cgtcagaaca agcgggaagag  
60  
aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct  
120  
gatgtgaaca caacgcaaac tgggttcaagc gccacgccca ttacacctgt acccttactg  
180  
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac  
240  
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta  
300  
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga  
349

<210> 1782

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
      20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
      35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
      50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
      85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
      100           105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

```

gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgccatt ttcaagcagg aagattccag ccttcattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaataat gggatgatat cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgcgc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag  
 960  
 cagagcactt gcagtgtccc agacagcaat tctttctccc caaatcatca gggagatgga  
 1020  
 gcttcacaga cctctgggtga acaaattcag ccttcagcta cgatccagga aacacagcaa  
 1080  
 tggctgctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc  
 1140  
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt  
 1200  
 cggtctata attcactgaa gtcaaggctcg gtttagacccc gtttaaccat ctatgtctgc  
 1260  
 cgaggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcaagc  
 1320  
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc  
 1380  
 tcagaagttg ctcgaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag  
 1440  
 gtttacagac aggggtccac cggtattcac attcttggtta gtgatcaggt aaatcaaac  
 1500  
 atttggtttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga  
 1560  
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc  
 1620  
 actttggaag aacttataac caagagtttc aggcaccta gtgataatat ggaatacaag  
 1680  
 ccaaggaaaa ctggcttagc ctccccccag ccctttagga tgcagccaat cactggggca  
 1740  
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc  
 1800  
 cttttgtcta ttatttgatg actaattta  
 1829

&lt;210&gt; 1784

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
	50					55				60					
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90					95		
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100					105					110		
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly



```
<210> 1785
<211> 381
```

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca  
 60  
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaagg ctacaaactt  
 120  
 acactcacia tgccctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggt  
 180  
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa  
 240  
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac  
 300  
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt  
 360  
 gatggccttg tatctggtat c  
 381

&lt;210&gt; 1786

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
		20					25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50				55				60						
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70				75						80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
		85					90					95			
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100					105					110			
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
	115					120					125				

&lt;210&gt; 1787

&lt;211&gt; 294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt  
 60  
 agggtcacct aacaaggaga tgagaacaaa ctttaaactct atctctctaa ggaatttgga  
 120  
 cttcggggttt ttaagggttta gaatggggcca aaacatggac attattgatt ggtcaaagag  
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgata ctgttcctct  
 240  
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacaatct tagg  
 294

<210> 1788  
 <211> 91  
 <212> PRT  
 <213> Homo sapiens

<400> 1788  
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser  
 1 5 10 15  
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn  
 20 25 30  
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile  
 35 40 45  
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys  
 50 55 60  
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu  
 65 70 75 80  
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu  
 85 90

<210> 1789  
 <211> 353  
 <212> DNA  
 <213> Homo sapiens

<400> 1789  
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca  
 60  
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc  
 120  
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc  
 180  
 gacctgtcc cgggggtctc tccgcaggc aggtctctc gccgagtctc cgaaaagggg  
 240  
 cggctgtggc ggccctggcg cccagctggg caacgcttcg tggatatctca ccgcttctct  
 300  
 ctgttgtgcc cagcgccccg actgaagatc cggatcttca gtccctggcg cgc  
 353

<210> 1790  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 1790  
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro  
 1 5 10 15  
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His  
 20 25 30  
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
      50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

```

<210> 1791  
 <211> 355  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
60
acccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
120
gctttggatc aagccaatgc atgtatcccc taacacacccc atgctttatg tggtccttgc
180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgctctgt atctgtatct
300
ccactccgat tcccattecc tctgtctctc tctctctctc cctcccttca cgcgt
355

```

<210> 1792  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
1      5      10      15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20      25      30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35      40      45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
50      55      60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
65      70      75      80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85      90      95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100      105

```

<210> 1793  
 <211> 510  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatatc  
 60  
 cccccctcgc gagctcctcg cttaccagtc gcccaaagag cttgtccccc cagcagccag  
 120  
 agtcagccag acccttagca aacaccatag gggtcacatc aatctcttct ccaacttcac  
 180  
 cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg  
 240  
 ccgagccgtg ctcattgtgg atgggtgcacc gatacacacc gcagtctacg ggggaggcct  
 300  
 gcacgatggc caaggccgcc ggcccctcat ccctgcgct cctgcccacc tcgcccactg  
 360  
 ggcgctgac cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc  
 420  
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct  
 480  
 gtggggcttt cagcaggtct ttggctttcc  
 510

&lt;210&gt; 1794

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55				60					
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65					70				75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90						95	
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
			100					105						110	
Pro	Thr	Gly	Arg												
			115												

&lt;210&gt; 1795

&lt;211&gt; 386

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1795

ctatgctctg agtcacttct ccaagcatte ctttctgttc ttcttccct gggtgatca  
 60  
 tttcaagaag tcctacatc cagaaaactt gagagtgct tcttctctgg aagccccctt  
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttgc  
180  
taattatcaa tctttccata taaacagtaa aggaccacag tttattcatc agattcccca  
240  
tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg  
300  
tctccagggt gagagctcca tgagggcacc aatttttgtc tgttttagctg tgtcctcaaa  
360  
gcaaggaagg gttgatccgg tctaga  
386

&lt;210&gt; 1796

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1				5					10					15	
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Ile	Lys	Gln	Lys	Ile	Ala	Asp
			20					25					30		
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40					45			
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50					55					60				
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65					70					75				80	
Glu	Val	Thr	Gln	Ser	Ile										
					85										

&lt;210&gt; 1797

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1797

aagcttcaact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac  
60  
cggaatttgc cgatgtcatt gatcagggtca tctgtctggg ctgccgcag cagggctcgc  
120  
gtgccgctaa tttgttggcg ccatttgctg gcggcgcac cgtaaatgg tgtatcacag  
180  
cgactatgtg atgccgcttg cgcccacgcc cggcagcgcg cgttgagagc ccatcaactc  
240  
acagatggac aacctggtgt tgccggtgac ctccggcaatt ttaccgggaa tgacctatgt  
300  
ggcgggtgat tacctggggc attgttcggt attgtacagc ccacgcgt  
348

&lt;210&gt; 1798

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1             5             10             15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20             25             30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35             40             45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50             55             60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65             70             75             80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85             90             95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100             105

```

&lt;210&gt; 1799

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1799

```

acgcgctcgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgctc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccaggcg
120
tcgattatatt cagagggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggtcatcgc aacgggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggctcggc
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
gggggtaccga agtgggcgcc tattctcgtg ctgcctctga tgagtatctt catgcttatc
360
gtgcac
366

```

&lt;210&gt; 1800

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1800

```

Thr Arg Arg Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1             5             10             15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20             25             30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35             40             45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50             55             60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65             70             75             80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

			85					90				95			
His	Val	Gly	Gln	Gly	Val	Pro	Lys	Trp	Ala	Pro	Ile	Leu	Val	Leu	Val
			100					105					110		
Leu	Met	Ser	Ile	Phe	Met	Leu	Ile	Val	His						
			115					120							

&lt;210&gt; 1801

&lt;211&gt; 597

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1801

```

aattttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttcgatacctg ccagcatctg ggtgacggtc
120
cttggaacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcggtg
180
cgtgctgctg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
240
catatggggg ttcccgggccc cggcggggccg tgctcggaaa tctacatcga tcgtgggcca
300
gcctatggtc ccgacgggtg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggcccattgc gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgcctaccta
480
ctccagggcg tcgacaatat gtacgagact gaccaggat tccctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
597

```

&lt;210&gt; 1802

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1802

Asn	Phe	Ser	Phe	Gly	Asp	Tyr	Phe	Lys	Asn	Glu	Ala	Ile	Gln	Tyr	Ala
1			5						10					15	
Trp	Glu	Leu	Val	Thr	Lys	Pro	Ala	Glu	Gln	Gly	Gly	Leu	Gly	Phe	Asp
			20					25					30		
Pro	Ala	Ser	Ile	Trp	Val	Thr	Val	Leu	Gly	Pro	Gly	Phe	His	Pro	Asp
			35				40					45			
Tyr	Pro	Glu	Gly	Asp	Ile	Glu	Ala	Arg	Glu	Ala	Trp	Arg	Ala	Ala	Gly
			50			55				60					
Ile	Pro	Asp	Glu	Gln	Ile	Gln	Gly	Arg	Ser	Leu	Lys	Asp	Asn	Tyr	Trp
65				70				75					80		
His	Met	Gly	Val	Pro	Gly	Pro	Gly	Gly	Pro	Cys	Ser	Glu	Ile	Tyr	Ile
			85				90						95		
Asp	Arg	Gly	Pro	Ala	Tyr	Gly	Pro	Asp	Gly	Gly	Pro	Glu	Ala	Asp	Glu
			100				105					110			
Asp	Arg	Tyr	Leu	Glu	Ile	Trp	Asn	Leu	Val	Phe	Glu	Thr	Glu	Asp	Leu



115	120	125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg		
130	135	140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu		
145	150	155
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val		160
	165	170
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His		175
	180	185
Asp Asp Asp Val Arg Leu Arg		190
195		

<210> 1803  
 <211> 708  
 <212> DNA  
 <213> Homo sapiens

<400> 1803  
 cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggcac acctaaggac  
 60  
 ctcatcctgg ccctcatctc cgagatcggc accgggtggg gacaagggtca tatgggtcga  
 120  
 tatcgcgggc aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg  
 180  
 tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac  
 240  
 ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg  
 300  
 cgcactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg  
 360  
 aatctcgccc ccttcgttac ctgggggtacc aaccggggc agggatcccc cctaggcggt  
 420  
 gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgagta  
 480  
 catggatttg accccgacga gatcggttcc cggtttgctg acatctttcg caataactct  
 540  
 gcgaacaacg gcttgttact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac  
 600  
 tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac  
 660  
 cttccgggtc gcacgaccta cccgttccat attgatgacg tcacgcgt  
 708

<210> 1804  
 <211> 236  
 <212> PRT  
 <213> Homo sapiens

<400> 1804  
 Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val  
 1 5 10 15  
 Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly  
 20 25 30  
 Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

	35					40						45							
Met	Ser	Met	Glu	Gly	Arg	Met	Thr	Ile	Cys	Asn	Met	Ser	Ile	Glu	Trp				
	50					55					60								
Gly	Ala	Arg	Val	Gly	Met	Val	Ala	Ser	Asp	Glu	Thr	Thr	Phe	Thr	Tyr				
65					70					75					80				
Leu	Lys	Asp	Arg	Pro	His	Ala	Pro	Arg	Gly	Ala	Gln	Trp	Asp	Lys	Ala				
				85					90					95					
Val	Ala	Tyr	Trp	Arg	Thr	Leu	Arg	Thr	Asp	Asp	Asp	Ala	Thr	Phe	Asp				
			100					105					110						
Ala	Glu	Ile	His	Val	Asp	Ala	Ser	Asn	Leu	Ala	Pro	Phe	Val	Thr	Trp				
	115						120				125								
Gly	Thr	Asn	Pro	Gly	Gln	Gly	Ser	Pro	Leu	Gly	Gly	Val	Val	Pro	Ala				
	130					135				140									
Val	Glu	Asp	Phe	Glu	Asp	Glu	Val	Ala	Arg	Ser	Ala	Ala	Phe	Gly	Val				
145					150					155					160				
His	Gly	Phe	Asp	Pro	Asp	Glu	Ile	Gly	Ser	Arg	Phe	Ala	Asp	Ile	Phe				
				165				170						175					
Arg	Asn	Asn	Ser	Ala	Asn	Asn	Gly	Leu	Leu	Leu	Ala	Gln	Val	Asp	Pro				
		180						185					190						
Lys	Val	Val	Gly	Glu	Leu	Trp	Asp	Phe	Ala	Glu	Gln	His	Pro	Gly	Glu				
	195						200					205							
Gln	Leu	Thr	Leu	Ser	Leu	Glu	Asn	Arg	Thr	Ile	Asn	Leu	Pro	Gly	Arg				
	210					215					220								
Thr	Thr	Tyr	Pro	Phe	His	Ile	Asp	Asp	Val	Thr	Arg								
225					230						235								

&lt;210&gt; 1805

&lt;211&gt; 833

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1805

```

nccgcagtgg tgtgggacaa gaacaccggt gagccggttt ataacgccat cgtgtggcag
60
gacacgcgca ctcaaaagat ctgtaacgaa ctagctggtg acaagggcgc cgaccgctac
120
aaggagatct gtggtctggg cctgtcgacc tatttctctg gcccgagggt caaatggatt
180
ctcgacaacg ttgagggagc ccgtgcgagg gccgaggccg gcgatctgct cttcggtaac
240
atggacactt ggggtgctgtg gaacctgact ggcggtacta acggtggcgt gcacatcacc
300
gatecgacca acgcgtcccc aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360
tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtctctctcc
420
gagatctacg gctatggctc caagaacggc ctgctgatcg ataccccgat ctccggcatt
480
cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag
540
aacacgtacg gcaaccgctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
600
gagaacggtc tgctgaccac cgtctgctac aagattgggt accagcccac cgtctatgcc
660

```

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgca caacctcaag  
 720  
 atgttcgaga cgcggccgca aatcgaagcc ctgcgaaca ccgtcgagga caatgggtggc  
 780  
 gcctactttg tgccggcctt ctctggcctg ttcgcgccgt actggcgctcc gga  
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1				5					10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50					55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75					80
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
			85						90					95	
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
		115					120					125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
	130					135						140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155					160
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
			165						170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
			180					185					190		
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
		195					200						205		
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
	210					215					220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235					240
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
			245						250					255	
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
			260					265					270		
Pro	Tyr	Trp	Arg	Pro											
			275												

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

&lt;400&gt; 1807

```

nnntatcggc aaggtggtcg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
60
gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
120
acaggcacac cgggtgcgtgg tgggtctcaca ttccgagaag gccactacat atgcgagggc
180
gtagctgaga ccggctcggtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
240
aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcggtc ggcgctgggg
300
gagacgcttc tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc
360
cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
420

```

&lt;210&gt; 1808

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1808

```

His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala
1      5      10      15
Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly
20     25     30
Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr
35     40     45
Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu
50     55     60
Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg
65     70     75     80
Ser Ala Leu Gly Glu Thr Leu Leu
85

```

&lt;210&gt; 1809

&lt;211&gt; 340

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1809

```

nnaccggtga tcgcatcggt gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
60
cagaccggtg tcacgcatgc gtatcgcttc gggcatggca gcctcctcgt gatgcggggc
120
cccacccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
180
gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc
240
ccgaggtgcc cggatcgccg ggcgattcgc gcccgtttt cgcgattcat gcgcgatcga
300
tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
340

```

<210> 1810  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 1810  
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp  
 1 5 10 15  
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His  
 20 25 30  
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His  
 35 40 45  
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr  
 50 55 60  
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg  
 65 70 75

<210> 1811  
 <211> 500  
 <212> DNA  
 <213> Homo sapiens

<400> 1811  
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttataacttca  
 60  
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttggtg  
 120  
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag  
 180  
 caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgctc  
 240  
 gagtgtatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac  
 300  
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa  
 360  
 caagctcgcg tgctcgtct catgctggct acttggetca ttgaattgta tgtggccgcc  
 420  
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag  
 480  
 acatttgagc ggcacatga  
 500

<210> 1812  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 1812  
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp  
 1 5 10 15  
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu  
 20 25 30  
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
   50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
   65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100              105              110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115              120              125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130              135              140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
      145              150              155              160
Thr Leu Glu Arg His His
      165

```

<210> 1813  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1813
tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
240
aataagggtt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
300
ccgctgtaga tcctccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
420
tctaca
426

```

<210> 1814  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1814
Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1              5              10              15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20              25              30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35              40              45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815  
 <211> 303  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1815
ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
60
cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgatc tcgaggggca acgcgcgcgc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtggaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1              5              10              15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20              25              30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35              40              45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50              55              60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65              70              75              80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85              90              95
Gly Thr

```

<210> 1817  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt cgatgcgtcg  
 60  
 catgcgtttg agccacacag cgatggcaca cttcaggtca ttcacgcaaa gacatggatc  
 120  
 ccgcgctcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt  
 180  
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cagccactt gccgcatgtg  
 240  
 tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac  
 300  
 ttccagcagc gataccccta atcaaactcc tgtgtgggag gcgtgtcatg tactactgtc  
 360  
 acttcctga caaagaaatc agcgtgtgctc tggctcgaca gcgaggcacg cgt  
 413

<210> 1818  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens

<400> 1818  
 Xaa Ser Leu Gln Asp Arg Gly His Thr Val Tyr Ile Leu Thr Ser His  
 1 5 10 15  
 Phe Asp Ala Ser His Ala Phe Glu Pro Thr Arg Asp Gly Thr Leu Gln  
 20 25 30  
 Val Ile His Ala Lys Thr Trp Ile Pro Arg Ser Leu Phe His Met Leu  
 35 40 45  
 His Leu Arg Trp Pro Phe Ala Val Phe Ser Leu Val Met Gln Val  
 50 55 60  
 Val Val Ala Ala Tyr Gly Ser Ser Leu Ala Arg His Leu Pro His Val  
 65 70 75 80  
 Tyr Arg Ala

<210> 1819  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<400> 1819  
 ggatccaaga gtggggcatc aggaacatgc catggttgctc gtggtgctgg aatgagaaca  
 60  
 atcacaagac agataggcct tggcatgata caacagatga aactgtttg ccctgaatgc  
 120  
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaacaaaa  
 180  
 gtagtccagg agaagaaggt gttagagggt catgtggaga aaggaatgca acataaccaa  
 240  
 aagattgtat tccagggtca ggctgatgaa gctcctgata cgggtacagg agacattgtt  
 300  
 tttgtcttgc aacttaaaga ccatccaaaa ttttaagagga tgt  
 343

<210> 1820



<211> 114  
 <212> PRT  
 <213> Homo sapiens

<400> 1820

Gly	Ser	Lys	Ser	Gly	Ala	Ser	Gly	Thr	Cys	His	Gly	Cys	Arg	Gly	Ala
1				5					10					15	
Gly	Met	Arg	Thr	Ile	Thr	Arg	Gln	Ile	Gly	Leu	Gly	Met	Ile	Gln	Gln
			20					25					30		
Met	Asn	Thr	Val	Cys	Pro	Glu	Cys	Lys	Gly	Ser	Gly	Glu	Ile	Ile	Ser
		35					40					45			
Asp	Lys	Asp	Lys	Cys	Pro	Ser	Cys	Lys	Gly	Asn	Lys	Val	Val	Gln	Glu
	50					55					60				
Lys	Lys	Val	Leu	Glu	Val	His	Val	Glu	Lys	Gly	Met	Gln	His	Asn	Gln
65					70					75				80	
Lys	Ile	Val	Phe	Gln	Gly	Gln	Ala	Asp	Glu	Ala	Pro	Asp	Thr	Gly	Thr
			85						90					95	
Gly	Asp	Ile	Val	Phe	Val	Leu	Gln	Leu	Lys	Asp	His	Pro	Lys	Phe	Lys
			100					105						110	

Arg Met

<210> 1821  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

<400> 1821

aagcttgagt tcagcaagat cttggaggct attaaggcaa acttcaacga caagttcgat  
 60  
 gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag  
 120  
 gcccgggaaa agttgctcgc caaggaggcc gccacgcgga tgacctagat tgtctactgc  
 180  
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa  
 240  
 tctagtttca tatgtttctg tccaccagac catgtttaga agctt  
 285

<210> 1822  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<400> 1822

Lys	Leu	Glu	Phe	Ser	Lys	Ile	Leu	Glu	Ala	Ile	Lys	Ala	Asn	Phe	Asn
1				5					10					15	
Asp	Lys	Phe	Asp	Glu	Val	Gly	Lys	Lys	Trp	Gly	Gly	Gly	Ile	Met	Gly
			20					25					30		
Ser	Lys	Ser	Gln	Ala	Lys	Thr	Lys	Ala	Arg	Glu	Lys	Leu	Leu	Ala	Lys
		35					40					45			
Glu	Ala	Ala	Gln	Arg	Met	Thr									
	50					55									

<210> 1823  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 1823  
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<210> 1824  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1824  
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 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln  
 35 40 45  
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr  
 50 55 60  
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro  
 65 70 75 80  
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu  
 85 90 95  
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp  
 100 105 110  
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 115 120 125  
 Leu

<210> 1825  
 <211> 413  
 <212> DNA  
 <213> Homo sapiens

<400> 1825  
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 413

<210> 1826  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 1826  
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 35 40 45  
 Val Pro Arg Tyr Ala Arg Pro Phe Leu Leu Ser Val Gly Leu Val Cys  
 50 55 60  
 Leu Glu Arg Asp Ala Trp Pro Thr Gly Thr Arg Cys Ile Gly Gly Leu  
 65 70 75 80  
 Pro Val Gly His Ala Ala Gly Ser Gly Leu Arg Cys Val Ala Asp Pro  
 85 90 95  
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<210> 1827  
 <211> 345  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
 aagtgaacc ggcgcagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac  
 300  
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 345

<210> 1828  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1828  
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 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln  
 35 40 45  
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met  
 50 55 60  
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp  
 65 70 75 80  
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile  
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 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp  
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<210> 1829  
 <211> 4457  
 <212> DNA  
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 720

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 4457

<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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Ile	Leu	Gln	Ser	Ser	Asp	Ser	Gly	Cys	Ser	Gln	Ser	Ser	Ala	Gly	Asp
	20						25					30			
Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
	35					40					45				
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
	50					55					60				
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
65					70				75					80	
Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
			85					90					95		
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
		100						105					110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
	115						120					125			
Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
	130					135					140				
Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
145				150				155						160	
His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
			165					170					175		
His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
		180					185						190		
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
	195					200						205			
Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Asp	Lys	Lys	Lys
	210					215				220					
Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

225                      230                      235                      240  
 Leu Asp Leu Glu Asn Trp Tyr Ser Cys Gly Glu Gly Asp Ile Ser Glu  
                                  245                      250                      255  
 Ile Glu Ser Asp Met Gly Ser Pro Gly Ser Arg Lys Ser Pro Asn Phe  
                                  260                      265                      270  
 Asn Ile His Pro Leu Tyr Gln His Val Leu Leu Tyr Leu Gln Leu Tyr  
                                  275                      280                      285  
 Asp Ser Ser Arg Thr Leu Tyr Ala Phe Ser Ala Ile Lys Ala Ile Leu  
                                  290                      295                      300  
 Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val  
 305                                   310                      315                      320  
 Asn Asn Ala Tyr Thr Pro Gln Leu Ser Leu Leu Gln Asn Leu Leu Ala  
                                  325                      330                      335  
 Arg His Arg Ile Ser Val Met Gly Lys Asp Phe Tyr Ser His Ile Pro  
                                  340                      345                      350  
 Val Asp Ser Asn His Asn Phe Arg Ser Ser Met Tyr Ile Glu Ile Leu  
                                  355                      360                      365  
 Ile Ser Leu Cys Leu Tyr Tyr Met Arg Ser His Tyr Pro Thr His Val  
                                  370                      375                      380  
 Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met  
 385                                   390                      395                      400  
 Ser Ile Glu Ile Leu Thr Leu Leu Phe Thr Glu Leu Ala Lys Val Ile  
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 Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser  
                                  420                      425                      430  
 Lys Cys Lys Val Gln Lys Val Ile Leu His Cys Leu Leu Ser Ser Ile  
                                  435                      440                      445  
 Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu  
                                  450                      455                      460  
 Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser  
 465                                   470                      475                      480  
 Glu Asp Glu Phe Asp Asn Gly Ser Thr Leu Gln Ser Gln Leu Leu Lys  
                                  485                      490                      495  
 Val Leu Gln Arg Leu Ile Val Leu Glu His Arg Val Met Thr Ile Pro  
                                  500                      505                      510  
 Glu Glu Asn Glu Thr Gly Phe Asp Phe Val Val Ser Asp Leu Glu His  
                                  515                      520                      525  
 Ile Ser Pro His Gln Pro Met Thr Ser Leu Gln Tyr Leu His Ala Gln  
                                  530                      535                      540  
 Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu  
 545                                   550                      555                      560  
 His Gln His Cys Ala Cys Lys Met His Pro Gln Trp Ile Gly Leu Ile  
                                  565                      570                      575  
 Thr Ser Thr Leu Pro Tyr Met Gly Lys Val Leu Gln Arg Val Val Val  
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 Ser Val Thr Leu Gln Leu Cys Arg Asn Leu Asp Asn Leu Ile Gln Gln  
                                  595                      600                      605  
 Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala  
                                  610                      615                      620  
 Ser Ile Ile Pro Pro Asp Met Ile Leu Thr Leu Leu Glu Gly Ile Thr  
 625                                   630                      635                      640  
 Ala Ile Ile His Tyr Cys Leu Leu Asp Pro Thr Thr Gln Tyr His Gln  
                                  645                      650                      655  
 Leu Leu Val Ser Val Asp Gln Lys His Leu Phe Glu Ala Arg Ser Gly



1419

1090	1095	1100
Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu		
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Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe		1120
	1125	1130
Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp		1135
	1140	1145
Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln		1150
	1155	1160
Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val		1165
	1170	1175
Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser		1180
1185	1190	1195
Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe		1200
	1205	1210
Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln		1215
	1220	1225
Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu		1230
	1235	1240
Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val		1245
	1250	1255
Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu		1260
1265	1270	1275
Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu		1280
	1285	1290
Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe		1295
	1300	1305
Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly		1310
	1315	1320
Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys		1325
	1330	1335
Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln		1340
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Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly Met Ile Lys		1360
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Thr

<210> 1831  
 <211> 508  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
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 360  
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 420  
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<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

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		20						25					30		
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
		35					40					45			
Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
		50				55					60				
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg
65					70					75					80
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85						90					95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
			100					105					110		
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
		115					120					125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
		130				135					140				
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
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Gln	Asp	Leu	Arg	Thr	Lys	Gly	Tyr	Ala							
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<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

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 ggcgcaaagc ggcgatgac ggcgtcgaaca gcgttactcc agccagcggg ccaaccaaca  
 180  
 gcatcaccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca  
 240  
 gcggccttggg ctcggttcc cagcgttccg gcggcggcca gccattttgg aaatcgacga  
 300

acatctccgg cgctcctgct gtcaggcgct gaaggtatcg aaagtcatgc gccgtgacaa  
360  
aggaagatcg gcgacacagg agccgaagcg ccgccgctg caataagcgc gcgcgatcgc  
420  
aattgtcggg  
430

<210> 1834  
<211> 122  
<212> PRT  
<213> Homo sapiens

<400> 1834  
Met Arg Arg Cys Arg Leu Asn Cys Pro Val Pro Arg Gln Thr Met Pro  
1 5 10 15  
Arg Arg Ala Ala Lys Gly Arg Arg Ser Val Ala Gln Ser Gly  
20 25 30  
Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln  
35 40 45  
His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala  
50 55 60  
Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg  
65 70 75 80  
Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln  
85 90 95  
Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala  
100 105 110  
Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln  
115 120

<210> 1835  
<211> 677  
<212> DNA  
<213> Homo sapiens

<400> 1835  
nataactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc  
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cccagtggca ccctatgcta ctgtggcacc cagcacttta gccaccccc aggcccaggc  
120  
tctggccccg cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctccccagac  
180  
gctgcagcac cctcagggta tcccgccacc ccaggcactg tcccaccctc agagcctcca  
240  
gcagcctcag ggcttgggccc accctcagcc catggcccaa acccagggtt tgggtccaccc  
300  
tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg  
360  
gaagatgcca gactcagatg cccccccgaa tgtgaccgtg tctacctcaa ctatccccct  
420  
ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca  
480  
gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca  
540

gacgcgccaac cccagcccca ttagtcgcag tctgctcatc aatgcaagca cccgggtgtc  
600  
gacccacagc gtccccacac caatgccttc atgtgtgggtc aatcccatgg agcacacca  
660  
cgcggccacc gccgcgg  
677

<210> 1836  
<211> 140  
<212> PRT  
<213> Homo sapiens

<400> 1836  
Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln  
1 5 10 15  
His Phe Ser Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro  
20 25 30  
Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala  
35 40 45  
Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro  
50 55 60  
Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro  
65 70 75 80  
Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro  
85 90 95  
Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys  
100 105 110  
Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly  
115 120 125  
Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu  
130 135 140

<210> 1837  
<211> 564  
<212> DNA  
<213> Homo sapiens

<400> 1837  
nntctagaac actctgcccc tgaatctgta ccgggattgt ttggcccgtc acgaactcgt  
60  
acgggtcgata tcaatatcac tgggttttct tcacagtatt taccgcccc ctatggacca  
120  
attgctgcgg acgtcaaaca aacctgggcg tgggacccac aggatctgac gattgtctca  
180  
acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg  
240  
acccgatcc agtaaccttc gataacgca aagccggcac cccacataac tcggntgtac  
300  
accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaaccg aattatcaag  
360  
gggaaatcta ccccgtaac caaggccatc gcgattcaaa actgggttcg tgacagcgct  
420  
cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc  
480

ctgctgcaca cccaccgcgg ttattgcac catttcgcgg cgtcaatggc actcatggca  
 540  
 cgacttgaag gtattccgtc acgc  
 564

<210> 1838  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 1838  
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro  
 1 5 10 15  
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln  
 20 25 30  
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr  
 35 40 45  
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp  
 50 55 60  
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro  
 65 70 75 80  
 Thr Pro Ile Gln

<210> 1839  
 <211> 300  
 <212> DNA  
 <213> Homo sapiens

<400> 1839  
 ncaatacggc tgaacaccgc tgatatcacc cgtactttcc ccgtcaacgg aaaattttcc  
 60  
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca  
 120  
 gccgttcttg gcaataaatt ccgcgacgtc catgctgcag cgatgaatgt tctcgcttcc  
 180  
 cgccttgagg actggggggt tatgccggtc agcgcggaagg tcgctcttcc ggacgagggc  
 240  
 gggcaacacc gtcgttggat gccgcacggc accagccacc atctagggtt ggatgtgcac  
 300

<210> 1840  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 1840  
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn  
 1 5 10 15  
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp  
 20 25 30  
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg  
 35 40 45  
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

50		55		60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly				
65	70	75	80	
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly				
	85	90	95	
Leu Asp Val His				
100				

<210> 1841  
 <211> 330  
 <212> DNA  
 <213> Homo sapiens

<400> 1841  
 nnetccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggcccggg  
 60  
 gtcgatccgg tggtcgagat cggcggtccc ggtacgctag cccaatcgat ggtcgccccg  
 120  
 cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg  
 180  
 acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccggtcgg cagccgcgcg  
 240  
 cagcaactcg cgatgatcgc gggggtcgag gcgaacggca tccgtccgat cctcgaccag  
 300  
 catttcccgc tcgaaaatct ccccgacgcg  
 330

<210> 1842  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1 5 10 15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
20 25 30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
35 40 45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
50 55 60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65 70 75 80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
85 90 95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
100 105 110

<210> 1843  
 <211> 473  
 <212> DNA  
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca  
 60  
 acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat  
 120  
 tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag  
 180  
 tgcggtccat ggtgtccagt gccacatag ggggttcaga tgattacatt ggtcttgctc  
 240  
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa  
 300  
 acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggaggtcttc  
 360  
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc  
 420  
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc  
 473

<210> 1844  
 <211> 141  
 <212> PRT  
 <213> Homo sapiens

<400> 1844  
 Met Lys Ala Asn Ser Phe Glu Ser Arg Leu Thr Pro Ser Arg Phe Met  
 1 5 10 15  
 Lys Ala Leu Ser Tyr Ala Ser Leu Asp Lys Glu Asp Leu Leu Ser Pro  
 20 25 30  
 Ile Asn Gln Asn Thr Leu Gln Arg Ser Ser Ser Val Arg Ser Met Val  
 35 40 45  
 Ser Ser Ala Thr Tyr Gly Gly Ser Asp Asp Tyr Ile Gly Leu Ala Leu  
 50 55 60  
 Pro Val Asp Ile Asn Asp Ile Phe Gln Val Lys Asp Ile Pro Tyr Phe  
 65 70 75 80  
 Gln Thr Lys Asn Ile Pro Pro His Asp Asp Arg Gly Ala Arg Ala Phe  
 85 90 95  
 Ala His Asp Ala Gly Gly Leu Pro Ser Gly Thr Gly Gly Leu Val Lys  
 100 105 110  
 Asn Ser Phe His Leu Leu Arg Gln Gln Met Ser Leu Thr Glu Ile Met  
 115 120 125  
 Asn Ser Ile His Ser Asp Ala Ser Xaa Xaa Xaa Xaa Pro  
 130 135 140

<210> 1845  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 1845  
 aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcac aatgagtggga  
 60  
 gtgacttget gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgacgtg  
 120  
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg  
 180



cgtggctccc agcagtaccg tgctctcact gtccctgagc tgacccagca gatgtgggac  
 240  
 tccaagaaca tgatgtgtgc tgctgacccg cgatcatggcc gctacctcac agtatctgcc  
 300  
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac  
 360  
 aagaactctt cctacttcgt ggagtggatc  
 390

<210> 1846  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1846  
 Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala  
 1 5 10 15  
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn  
 20 25 30  
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu  
 35 40 45  
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln  
 50 55 60  
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp  
 65 70 75 80  
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu  
 85 90 95  
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp  
 100 105 110  
 Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu  
 115 120 125  
 Trp Ile  
 130

<210> 1847  
 <211> 343  
 <212> DNA  
 <213> Homo sapiens

<400> 1847  
 cagccgtgct ttcctgcgtc aactcgggaa cggctatatc gcgcagatcc aacagttcca  
 60  
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtaaa gctggcgacc  
 120  
 ctggccgccc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag  
 180  
 caaaaaagtt gcggacaatc tcctgccgga tggctcgggtg ttcgacttca gggagcgcga  
 240  
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcgggccc tggcgggcaa  
 300  
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn  
 343

<210> 1848

<211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 1848  
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg  
 1 5 10 15  
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val  
 20 25 30  
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser  
 35 40 45  
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr  
 50 55 60  
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala  
 65 70 75 80  
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr  
 85 90

<210> 1849  
 <211> 390  
 <212> DNA  
 <213> Homo sapiens

<400> 1849  
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt  
 60  
 gacattgaac atggagaccc aaaagagaat gtactagggt cagcttttga catgaaacag  
 120  
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca  
 180  
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca  
 240  
 tggatgtatc cgggtgaacga agagctgtac tccagaaccc tccagcctct cctctttatc  
 300  
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct  
 360  
 gacaaggaaa ggaaanatga ttacaatcaa  
 390

<210> 1850  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 1850  
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu  
 1 5 10 15  
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu  
 20 25 30  
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr  
 35 40 45  
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln  
 50 55 60  
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

65					70					75				80	
Trp	Met	Tyr	Pro	Val	Asn	Glu	Glu	Leu	Tyr	Ser	Arg	Thr	Leu	Gln	Pro
				85					90					95	
Leu	Leu	Phe	Ile	Asn	Ser	Ala	Lys	Phe	Gln	Thr	Pro	Lys	Asp	Ile	Ala
			100					105					110		
Lys	Met	Lys	Lys	Phe	Tyr	Gln	Pro	Asp	Lys	Glu	Arg	Lys	Xaa	Asp	Tyr
		115					120						125		
Asn	Gln														
	130														

<210> 1851  
 <211> 574  
 <212> DNA  
 <213> Homo sapiens

<400> 1851  
 ncgatcggag aggcctttccg cactggtgac ttggactcta agcccgaccc cagccggagc  
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 ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag  
 120  
 ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag  
 180  
 cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatgggtcca gctgaaggag  
 240  
 gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg  
 300  
 aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa  
 360  
 ttcaagcaca acttctctgct gctcttcatg aagctcaggt ggttcctcaa gcgctggcgg  
 420  
 cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggag  
 480  
 ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc  
 540  
 acgggggaca gctggaccca gaacacgccc aatg  
 574

<210> 1852  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 1852  
 Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp  
 1 5 10 15  
 Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr  
 20 25 30  
 Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp  
 35 40 45  
 Ser Leu Arg Gly Leu Gln Glu Gln Leu Ser Gln Glu Arg Gln Leu Arg  
 50 55 60  
 Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu  
 65 70 75 80  
 Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

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<400> 1854
Met Pro His Pro Pro Trp Lys Arg Cys Arg Ser Ala Thr Ser Leu Arg
 1          5          10          15
Ser Ala Pro Ser Lys Leu Thr Cys Ser Ser Ala Arg Ser Ile His Ser
          20          25          30
Ser Leu Arg Arg Ala Trp His Phe Cys Ala Ser Arg Thr Thr Trp Met
          35          40          45
Ala Arg Ser Ala Arg Arg Phe Thr Trp Met Thr Met Ser Phe Leu Ser
          50          55          60
Arg His Arg Ser Ser Ala Gln Pro Arg Ala Ser Asp Ser Asn Thr Ser
65          70          75          80
Pro Ser Leu Trp Pro Ser Cys Ser Ser Ala Leu Leu His Arg Ile His
          85          90          95
Ile Pro Lys Leu
          100

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<210> 1855  
<211> 429  
<212> DNA  
<213> Homo sapiens

<400> 1855  
gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac  
60  
ccgagcgaaa cgcaggaaat cgtggcgcac gtcttgacc tggacaacca cgaggtcacg  
120  
gtgcagtgct tgcgcatggg cgggtggcttt ggcggttaagg aaatgcagcc gcacgggttc  
180  
gccgcgatcg cagcactcgg cgcgacctg accgggacgac cggttcgact gcgactgacc  
240  
cgaaaccagg acatcaccat ctccggaaaag cgccacccat acctcgcgga gtgggacgtg  
300  
gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg  
360  
tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc  
420  
tattggatc  
429

<210> 1856  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 1856  
Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys  
1 5 10 15  
Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu  
20 25 30  
Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly  
35 40 45  
Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala  
50 55 60  
Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr  
65 70 75 80  
Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala  
85 90 95  
Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg  
100 105 110  
Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro  
115 120 125  
Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile  
130 135 140

<210> 1857  
<211> 393  
<212> DNA  
<213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgcctac cgatcaacag acgcagccgc cgtgcgttga  
 60  
 gataccagcc gagcacgata atgctcagca tggtcagcag cagccagaac ggaaatcgca  
 120  
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca  
 180  
 gtgcgccgag gagcagccac catcgcccg ccatgctgcg gcactcgata ccaatacggt  
 240  
 gcgcttcaac caatcgatct tggtcgaggc atgccgcca tcttccaaca ggcgagtcac  
 300  
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggt gcaaaccgag  
 360  
 acgcagcacg ggtgcctgtc ggtggcgggc gag  
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5				10					15		
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
			20					25					30		
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	Arg	Pro	Leu	Met	Leu	Arg	His	
		35				40					45				
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50				55					60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65				70					75					80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90						95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
				100											

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgtcac caacttcctc tacttccgca agatggattt ggattttctg  
 60  
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga  
 120  
 agaactgccg acttttttta catgctcttg tttgggtgcta ctgtcctaac tagcattggt  
 180  
 ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc  
 240  
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatag  
 300  
 agcaatctgg gcctgttcac ctttacgggt gcatacttac catgg  
 345

<210> 1860  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

<400> 1860  
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp  
 1 5 10 15  
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu  
 20 25 30  
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met  
 35 40 45  
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly  
 50 55 60  
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser  
 65 70 75 80  
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro  
 85 90 95  
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr  
 100 105 110  
 Leu Pro Trp  
 115

<210> 1861  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 1861  
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggCGT tagaaaagcc  
 60  
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa  
 120  
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg  
 180  
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt  
 240  
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa  
 300  
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggtttaga aatcccaacg  
 360  
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggtttatt ccatgcttat  
 420  
 cgtttagcga ttgca  
 435

<210> 1862  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 1862  
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

```

      1           5           10           15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
      20           25           30
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
      35           40           45
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr
      50           55           60
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
      65           70           75           80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
      85           90           95
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
      100          105          110
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
      115          120          125
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
      130          135          140
Ala
145

```

&lt;210&gt; 1863

&lt;211&gt; 792

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1863

```

nggatcctca cgcccgccat catacgtggg atatcgttga gcaaatgcgt catgacgggg
60
tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctggct gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctcaactaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcacct caggccgcac cggctgctgc acgctgctgc
300
aaccacgtc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccacgggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctcaagtctg gcgctcgcca tctggtcgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgtag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgtcagg tgatactgct tgtcatcadc tcttttagcgc tgggctggca ccccccacgt
660
tccggcctgg cctggctccc aaccctggtg agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcaactctcg actggccaac
780
ttggtataca tc
792

```



<210> 1864  
 <211> 264  
 <212> PRT  
 <213> Homo sapiens

<400> 1864  
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys  
 1 5 10 15  
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg  
 20 25 30  
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser  
 35 40 45  
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys  
 50 55 60  
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp  
 65 70 75 80  
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala  
 85 90 95  
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg  
 100 105 110  
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile  
 115 120 125  
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val  
 130 135 140  
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr  
 145 150 155 160  
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Tyr Gly Val Leu Glu  
 165 170 175  
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys  
 180 185 190  
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val  
 195 200 205  
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala  
 210 215 220  
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly  
 225 230 235 240  
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu  
 245 250 255  
 Gly Leu Ala Asn Leu Val Tyr Ile  
 260

<210> 1865  
 <211> 717  
 <212> DNA  
 <213> Homo sapiens

<400> 1865  
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 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg  
 120  
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc  
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag  
 240  
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag  
 300  
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccgggctg  
 360  
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc  
 420  
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtgcagcct  
 480  
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt  
 540  
 caagcacagc ttttgcagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc  
 600  
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca  
 660  
 taccaacggt taaaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga  
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
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Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
		50				55						60			
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65					70				75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
			100					105					110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
		115					120					125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
130						135					140				
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145					150					155				160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165					170					175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
			180					185					190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
		195					200					205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
210					215						220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

&lt;210&gt; 1867

&lt;211&gt; 518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1867

nnggggcacg gttagggcca gtgggcagag gggtgaggga tatgcaggac cttccactgt  
60  
tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg  
120  
gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca  
180  
tctggttggc tggccctggt acccaacaac gtggtggcca aggccttggtg cccggagagg  
240  
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca  
300  
cctctctgc ctccaccct tccaccnng cagccccgc ctctcccgca gaactctccc  
360  
caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa  
420  
gcgaggtgct ttgcaccccc aagtgatcat gttcccgtgc ccagcctgcc aaggatgatg  
480  
ggagcttggg gagcggggtc tggcagggtc tttccgga  
518

&lt;210&gt; 1868

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1868

Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val  
1 5 10 15  
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu  
20 25 30  
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro  
35 40 45  
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro  
50 55 60  
Gln Ala Arg Pro Pro Gly Pro Ala Ala  
65 70

&lt;210&gt; 1869

&lt;211&gt; 436

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1869

acgcgtcacc ttcctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga  
60  
ccgtgacatg ccgagcaccg aaaccacact gtggattcgc gagctgagcc gcatcgaccg  
120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac  
 180  
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgcca gcggtctact gccgtcgttg  
 240  
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa  
 300  
 cgacagcatc cgacggaccc acgcggcaca cgacggtcgc ttccgagcct tgctttcggc  
 360  
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgctgggt  
 420  
 cgacaccgtc aacagg  
 436

<210> 1870  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 1870  
 Met Pro Ser Thr Glu Thr His Leu Trp Ile Arg Glu Leu Ser Arg Ile  
 1 5 10 15  
 Asp Arg Asp Val Ser Thr Ala Thr His Phe Arg Trp Ser Asp Asp Gly  
 20 25 30  
 Thr Val Leu Gly Gln Thr Thr Asp Asp Gly Thr Glu Pro Glu Val Val  
 35 40 45  
 Ala Leu Pro Ala Val Tyr Cys Arg Arg Cys Gly Arg Ser Gly Trp Gly  
 50 55 60  
 Val Gln Leu Ala Ser Thr Gly Asn Asn Leu Ser Glu Asn Asn Asp Ser  
 65 70 75 80  
 Ile Arg Arg Thr His Ala Ala His Asp Gly Arg Phe Arg Ala Leu Leu  
 85 90 95  
 Ser Ala Pro Arg Glu Gly Ala Ser Ala Val Asp Thr Gly Glu Ala Thr  
 100 105 110  
 Leu Ser Leu Arg Trp Phe Asp Thr Val Asn Arg  
 115 120

<210> 1871  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 1871  
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 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg  
 120  
 cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa  
 180  
 tcaggtattc cggactttcg ctcggctggc gggctttaca ccactcagca tgacctgccc  
 240  
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc  
 300  
 gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg  
 360

ttggttgccct tggagcaggc tggggaactt tgcacgatca ttacccagaa tattgacggc  
420  
ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggc gcac  
474

<210> 1872  
<211> 125  
<212> PRT  
<213> Homo sapiens

<400> 1872  
Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr  
1 5 10 15  
Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp  
20 25 30  
Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe  
35 40 45  
Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala  
50 55 60  
Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg  
65 70 75 80  
Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu  
85 90 95  
Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala  
100 105 110  
Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His  
115 120 125

<210> 1873  
<211> 338  
<212> DNA  
<213> Homo sapiens

<400> 1873  
nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg  
60  
ggttcctctcg gggatctcgg aggggagacc cccaccggg aggactggag gcagcgcctc  
120  
tcccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc  
180  
ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaac ggtgcccagt gggagcgaag  
240  
ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat  
300  
gcatatgagt caccaggaaa gttttttgaa acaaattt  
338

<210> 1874  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 1874  
Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

1	5	10	15
Ser Leu Gly Asp	Leu Gly Gly Glu	Thr Pro Thr Arg	Glu Asp Trp Arg
20	25	30	
Gln Arg Leu Ser	Arg Pro Gly Ala	Arg Ser Leu Phe	Pro Ser Phe Gln
35	40	45	
Gly Ala Asn Pro	His Arg Gly Pro	Gln Gly Ala Arg	Ser Arg Gln Gly
50	55	60	
Pro Arg Arg Glu	Arg Cys Pro Val	Gly Ala Lys Gly	Glu Ala Ser Pro
65	70	75	80
Trp Ser Leu Ala	Gly Ser Ser Gly	Pro Ala Ser Lys	Phe
85	90		

&lt;210&gt; 1875

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1875

```

aagcttggcg tacaagtggg tcgtcgtttc tcaggtgggtg gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttcg tgattttgga
120
aaattcacag aaccgtgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

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&lt;210&gt; 1876

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1876

Lys Leu Gly Val	Gln Val Val Arg	Arg Phe Ser Gly	Gly Gly Gly Ala Val
1	5	10	15
Tyr His Asp Met	Gly Asn Ile Cys	Phe Cys Phe Ile	Thr Glu Asp Asp
20	25	30	
Gly Asp Ser Phe	Arg Asp Phe Gly	Lys Phe Thr Glu	Pro Val Ile Glu
35	40	45	
Ala Leu His Lys	Met Gly Ala Thr	Gly Ala Glu Leu	Gln Gly Arg Asn
50	55	60	
Asp Leu Leu Ile	Asp Gly Lys Lys	Phe Ser Gly Asn	Ala Met Tyr Ser
65	70	75	80
Asn Asn Gly Arg	Leu Thr Ala His	Gly Thr Leu Met	Leu Asp Leu Asp
85	90	95	
Val Ser Ile Leu	Pro Gln Ile Leu	Arg Pro Lys Gln	Glu Lys Ile Glu
100	105	110	
Ser Lys Gly Ile	Lys Ser Val Arg	Ser Arg	

115

120

<210> 1877  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 1877  
 acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac tacccattaa  
 60  
 cgagggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt  
 120  
 ccaagctgct ggaccaaggg ctgtaggggt gcaacgacct attatatctg aacatttttt  
 180  
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc  
 240  
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg  
 300  
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg  
 357

<210> 1878  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 1878  
 Met Gln Ile Ala Glu Ile Ser Leu Ser Asp Cys Gly Tyr Ile Ile Ser  
 1 5 10 15  
 Ser Phe Gln Ala Ala Gly Pro Arg Ala Val Gly Leu Gln Arg Pro Ile  
 20 25 30  
 Ile Ser Glu His Phe Phe Gln Phe Asp Pro Phe Asp Lys Arg His Trp  
 35 40 45  
 Val Val Ser His His Leu Pro His Ala Ala Thr Ala Ala Phe Thr Ser  
 50 55 60  
 Gly Phe Glu Asp Cys Ala Gly Leu Val Ser Asp Thr Ala Gly Ser Asn  
 65 70 75 80  
 Thr Leu Asp Gly Lys Asp Tyr Val Glu Ser Cys Cys Asn Ala Ile Pro  
 85 90 95

<210> 1879  
 <211> 1062  
 <212> DNA  
 <213> Homo sapiens

<400> 1879  
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 60  
 tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctcctct  
 120  
 gtccctccca caggctctga cgcccgctct ggggcttcgg tgtttgaaca ggccacagtc  
 180  
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg  
 240

ttaagatcct gggtccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga  
 300  
 tgcaccatgc caatagtggg taagttgaag gaggccctga aaccggccg caaggactcg  
 360  
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag  
 420  
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc  
 480  
 aaatatgtgt tgctcaaccc caaaacagag ggagctagtc gccacaagag tggagatgac  
 540  
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca  
 600  
 gccccgcaga aagtgttttt cccacaggag cgactgtctc tgaggtggga gcgggtcttc  
 660  
 cgcggtgggcg caggactcca caaccttggc aacacctgct ttctcaatgc caccatccag  
 720  
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgcagc  
 780  
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc  
 840  
 gccaacagcg gcaacgccat caagcccgtc tccttcatcc gagacctgaa aaagatcgcc  
 900  
 cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggta caccatcgac  
 960  
 gccatgcaga aagcctgcct gaatggctgt gccaaagttgg atcgtcaaac gcaggctact  
 1020  
 accttgggtcc atcaaatttt tggagggtat ctcagatcac gc  
 1062

&lt;210&gt; 1880

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10						15	
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35				40					45				
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50				55						60				
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65				70						75				80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90						95	
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100						105					110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
	115						120					125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130				135						140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His



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145          150          155          160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln
          165          170          175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg
          180          185          190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp
          195          200          205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys
          210          215          220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu
225          230          235          240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg
          245          250

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<210> 1881  
 <211> 358  
 <212> DNA  
 <213> Homo sapiens

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<400> 1881
natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
60
aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
300
ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
358

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<210> 1882  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

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<400> 1882
Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
1      5      10      15
Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
20     25     30
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
35     40     45
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
50     55     60
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
65     70     75     80
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
85     90     95
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
100    105    110
Ile Arg Arg

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115

<210> 1883  
 <211> 367  
 <212> DNA  
 <213> Homo sapiens

<400> 1883  
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 60  
 gggctgggag aatgatacta agacaccaga catcacatcc attgctccca ttcccactat  
 120  
 tgctgaaggc gatgagtctg tatttgtaa ctccaattca aacagctcga tggtgctctc  
 180  
 tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat  
 240  
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg  
 300  
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg  
 360  
 cgatttn  
 367

<210> 1884  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1884  
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp  
 1 5 10 15  
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala  
 20 25 30  
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser  
 35 40 45  
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val  
 50 55 60  
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu  
 65 70 75 80  
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp  
 85 90 95  
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp  
 100 105 110  
 Met Pro Ile Ala Gly Asp Xaa  
 115

<210> 1885  
 <211> 392  
 <212> DNA  
 <213> Homo sapiens

<400> 1885  
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 60

gttcgacgat ctcggcatgt tgggaacccg gtgatttctc gcctgcggcg cacctcgtgg  
120  
ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccggggtt ccaaccactg  
180  
aactggtgga tccctgctcat tcccgggtctc gctgcgctca tccctgctggt ggcgaacgcc  
240  
actggtcggg ccgcggcagg actgggggtat ctcttcggca tcgggtctggt taccaccacc  
300  
atttcctggg taggcgtcat cggccccccg gtggcgatac ttctcatcgc tgtcatggcg  
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ttgtggtgtc tgctggccgg gtggacgatt cg  
392

<210> 1886  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 1886  
Xaa Ala Tyr Ser Gln Arg Met Ser Leu Arg His Arg Asp Ser Arg Arg  
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Pro Arg His His Val Arg Arg Ser Arg His Val Gly Asn Pro Val Ile  
20 25 30  
Ser Arg Leu Arg Arg Thr Ser Trp Leu Arg Ser Thr Ala Ala Val Ala  
35 40 45  
Ala Gly Ala Ala Thr Gly Thr Gly Phe Gln Pro Leu Asn Trp Trp Ile  
50 55 60  
Leu Val Ile Pro Gly Leu Ala Ala Leu Ile Leu Leu Val Arg Asn Ala  
65 70 75 80  
Thr Gly Arg Ala Ala Gly Leu Gly Tyr Leu Phe Gly Ile Gly Leu  
85 90 95  
Phe Thr Thr Thr Ile Ser Trp Val Gly Val Ile Gly Pro Pro Val Ala  
100 105 110  
Ile Leu Leu Ile Ala Val Met Ala Leu Trp Cys Leu Leu Ala Gly Trp  
115 120 125  
Thr Ile  
130

<210> 1887  
<211> 363  
<212> DNA  
<213> Homo sapiens

<400> 1887  
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120  
gctgcccaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt  
180  
ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt  
240  
gggtctgcccg aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc  
300

attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg  
 360  
 cgt  
 363

<210> 1888  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1888  
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly  
 1 5 10 15  
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val  
 20 25 30  
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His  
 35 40 45  
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro  
 50 55 60  
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu  
 65 70 75 80  
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly  
 85 90 95  
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val  
 100 105 110  
 Leu Arg Thr Ala Asp Ala Ile Thr Arg  
 115 120

<210> 1889  
 <211> 530  
 <212> DNA  
 <213> Homo sapiens

<400> 1889  
 gcaccagatc tgctcatggc ggcgattgcg acggcaacgc agtcgatccg gcttgggtct  
 60  
 ggtggggtga tggccatgca ctacgggtcg ctgcaaatag cggaacgggtt ttcgaccctc  
 120  
 acagcgctct tcggtgatcg tatcgacatg gggctgggccc gggctcccgg cggtgacatg  
 180  
 ctctccgccc atgccctcaa tcaggggcag gtcattccgc ctgaggccat taattccctc  
 240  
 atcgccgaaa cggtaggggt cgtgcgcgaa atgctaccgt cgaagcatcc gtacgcaaag  
 300  
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc  
 360  
 cagtcagcag cgtgggctgg tgagcagggt atggactacg cctacgccca gtttttcacc  
 420  
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggcttcccc  
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 ggcaggaccc tctcagcagt gtgtgtatcg gctgctccga cgcgtccgga  
 530

<210> 1890

<211> 176  
 <212> PRT  
 <213> Homo sapiens

<400> 1890  
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile  
 1 5 10 15  
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln  
 20 25 30  
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile  
 35 40 45  
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His  
 50 55 60  
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu  
 65 70 75 80  
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His  
 85 90 95  
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln  
 100 105 110  
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu  
 115 120 125  
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp  
 130 135 140  
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro  
 145 150 155 160  
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro  
 165 170 175

<210> 1891  
 <211> 423  
 <212> DNA  
 <213> Homo sapiens

<400> 1891  
 agatctcagg gagacagagg ggcccgggat aggaagaata tgtgggcacc tctcccacag  
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 cgtcaattta cagaggcagc ccagcttcct atcaactttc tggcctggct taacggtgta  
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 240  
 ggattttgta ccggtatggg gaggcactac ggttgcagat ttagcttttc agcgtggata  
 300  
 caagcaccce agtgtcccag accacagcag aaaccgtgtt gctgccgttt ccaacctgct  
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 tgc  
 423

<210> 1892  
 <211> 121  
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
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Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
          20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
          35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
          50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
          85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
          100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
          115          120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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120
gtggaataca tgggtggcat ggacgacctc gtcgggacgc tcgccgagtt taagcctggt
180
ccggggcctc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
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300
tttattgaca tctggcaggc catcaaact caacgaattg gccgtcaaga atggcctgag
360
gtccccgatg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
acccaagctg acgtcggtaa ggctggcag gccatgctgg cacgagtgcg cgactggcac
480
gatttagacc cccgctttaa cacggagatg gagaaactta tcgatttcgt cacgcgtgac
540
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600
acctcatccg ggatgtgagt gccaggggta tcgatccccg gttccggacc ctccacgac
660
atcaaatacca ccagaaaaag cccggggact tcgttactga tgccgatcgt caggccgagt
720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgctgtgggg gaggaatcag
780
ccttcgccga cccaaccatc cttgatgccg tttccgatgc tgacctggcc tgggtcatcg
840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca  
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

Thr	Gly	Gly	Ala	Glu	Pro	Ala	Arg	Val	Ala	Leu	Pro	Ser	Arg	Ile	Tyr
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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp
			35				40					45			
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
	50					55				60					
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75					80
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
				85					90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105						110	
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
			115				120					125			
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
			130				135				140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145					150				155					160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
				165				170					175		
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
			180					185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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120  
cttcccctgt tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac  
180  
acaacttttag aaagttgctt gcagaacaaa aaggctacac aaaagccacac tggctctcaa  
240  
taccctcaag tggatggcag aggtcttctg tgaaagtggg caatttgcaa tctttgcatt  
300  
aggatttcag atgcatgccg ggtttccact gattgccaga actcgagatc actacacatg  
360  
gatcccaaaa atcaacatgg cagtggcagt tcgtagttg tgatccagca gccttctttg  
420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta  
480  
gaccagatca aggccataag aggcagcaat gaatacacag aagggccttc ggtgggtgaaa  
540  
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720  
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780  
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900  
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960  
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1080  
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1140  
gccatgtctt tatttttacc ttgcttactc tggtatcctc ctgctaaagg atgcctgaag  
1200  
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1260  
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1320  
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1380  
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1620  
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1680  
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1740  
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1800  
gggatatatt ttttgctata acgtaaaaaat tttcctttaa ccactgccct ctcccttctc  
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cttcaagggtt ctttccccct cagttttgtt gttgtcttac tctggagatg ccaagtgtat  
1920  
ttttctttc tatgtaattt tagattcgcc ttacaatgta aatcttcaca ttggagataa  
1980  
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2040



cttccttctt caccatgc ttctcaccaa atttttgttg tcattgaggg cacttggata  
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 2340  
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 2400  
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 2460  
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 2520  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa  
 2555

<210> 1896  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 1896  
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg  
 1 5 10 15  
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 20 25 30  
 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile  
 35 40 45  
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn  
 50 55 60  
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met  
 65 70 75 80  
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala  
 85 90 95  
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg  
 100 105 110  
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu  
 115 120 125  
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser  
 130 135

<210> 1897  
 <211> 938  
 <212> DNA  
 <213> Homo sapiens

<400> 1897  
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cacgcttccct ccctgagcaa acaccggggcc atccatcgtg gggagcggcc ccaccgctgt  
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 240  
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 aagcgttttg ctcagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag  
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 938

&lt;210&gt; 1898

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
1				5					10					15	
Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
			20					25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40					45			
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
	50					55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65				70					75					80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
		115					120					125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
	130				135						140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

145		150		155		160									
Arg	Arg	Ala	His	Ser	Gly	Glu	Cys	Pro	Tyr	Val	Cys	Asp	Gln	Cys	Gly
				165					170					175	
Lys	Arg	Phe	Ser	Gln	Arg	Lys	Asn	Leu	Ser	Gln	His	Gln	Val	Ile	His
			180					185					190		
Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Pro	Asp	Cys	Gly	Arg	Cys	Phe	Arg
		195					200					205			
Arg	Ser	Arg	Ser	Leu	Ala	Asn	His	Arg	Thr	Thr	His	Thr	Gly	Glu	Lys
	210					215					220				
Pro	His	Gln	Cys	Pro	Ser	Cys	Gly	Arg	Arg	Phe	Ala	Tyr	Pro	Ser	Leu
225				230						235				240	
Leu	Ala	Ser	His	Arg	Arg	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Ala	Cys
			245					250						255	
Asp	Leu	Cys	Ser	Lys	Arg	Phe	Ala	Gln	Trp	Ser	His	Leu	Ala	Gln	His
		260						265				270			
Gln	Leu	Leu	His	Thr	Gly	Glu	Lys	Pro	Phe	Pro	Cys	Leu	Glu	Cys	Gly
	275						280					285			
Arg	Ala	Ser	Ala	Arg	Gly	Gly	Leu	Trp	Leu	Ser	Thr	Ser	Val	Ala	Pro
	290					295					300				
Arg	Pro	Gln	Thr	Val	Ala	Leu	Asp								
305					310										

&lt;210&gt; 1899

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1899

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60
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120
gaggaaatat caggccggct gcggagggaa ctgggccaac gggacaggaa cggggggcag
180
ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgcac agacatggag ttcacctttg ttcagctgaa gaaggacctg
300
gatgcagagt gtcttcacatg gactgaactg gaaaccaagt taaaaagcct ggagagcttc
360
gtggagttga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
480
gaggaggtga aggcccagta tgacgccg
508

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&lt;210&gt; 1900

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1900

```

Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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```

1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
65           70           75

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&lt;210&gt; 1901

&lt;211&gt; 453

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1901

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60
cgggtgttcgg cgatgcgaag gcaaccgcgc cttccaagtt cgaccggttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcacccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtcctccg tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgaggga acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

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&lt;210&gt; 1902

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1902

```

Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

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115	120	125
Arg Ala Thr Leu Ser Asp	Ala Ser Ala Thr Glu	Phe Arg Glu Met Lys
130	135	140
Glu Ile Leu Ile Glu Gly	Gly	
145	150	

<210> 1903  
 <211> 531  
 <212> DNA  
 <213> Homo sapiens

<400> 1903  
 ccggcgaggg agctgttccg ggacgccg cc tccccgccg cggactcctc gctcttctgc  
 60  
 gacttgtcta cgcgcgtggc ccagttccgc gaggacatca cgtggaggcg gccccagaga  
 120  
 atttgtgcca acccccgcctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg  
 180  
 ctgctggggg attgctgggt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc  
 240  
 ctggaccagg tcattcctgc gggacagccg agctggggccg accaggagta ccggggctcc  
 300  
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc  
 360  
 ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa  
 420  
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg  
 480  
 agcacaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgatc a  
 531

<210> 1904  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 1904  
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser  
 1 5 10 15  
 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp  
 20 25 30  
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe  
 35 40 45  
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp  
 50 55 60  
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu  
 65 70 75 80  
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu  
 85 90 95  
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val  
 100 105 110  
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg  
 115 120 125  
 Met Pro Trp Trp Thr

130

<210> 1905  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 1905  
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60  
ctggccatga gccggatcct cgcgcgcttt tcgggtccgtc ggggtgctgct ggccagtttc  
120  
ctcctggccg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcgggtgctg  
180  
ttgttcgccc aggtgctgca cgcggcgacc tttgccagct ttcacgcctc tgccattcat  
240  
ttcgtgcaac gtagcttcgg cgcgcgcncg gcaaggccag ggcaggcggt atacgtgca  
300  
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360  
gggccgacct ggactttcag catcggt  
387

<210> 1906  
<211> 129  
<212> PRT  
<213> Homo sapiens

<400> 1906  
Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu  
1 5 10 15  
Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val  
20 25 30  
Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu  
35 40 45  
Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln  
50 55 60  
Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His  
65 70 75 80  
Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala  
85 90 95  
Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr  
100 105 110  
Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile  
115 120 125  
Val

<210> 1907  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 1907

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60  
aagctgcgcg ccgcgcgcgc cgaaacgctc gagatgtgcg tcaacgacct gttccccggc  
120  
ggcggcgaca cgtcgaaggc caggttcttg acgggcctgc gcccgatgac gccggacggc  
180  
acgccgatcg tcggccgcac gccggtgtcg aacctgttcc tgaacaccgg ccacggcacg  
240  
ctcggctgga caatggtgtg cggctcgggc caactgctcg ccgacctgat ctcgggcaag  
300  
atgcccgcga tccaggccga cgacctgtct nnc  
333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
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Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65					70					75				80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85					90						95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105						110	

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

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120  
actccggagg agctggcagc cctctttgctg ccctacggca cggcatgag ctgcgccgtc  
180  
atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa  
240  
gccctgcacg gccacgagct gcggccgggg gcgcgctcg tggtggaat gtcgcgcccc  
300  
aggcctctta atacttgga gattttctgt ggcaatgtgt cggctgcatg cagagccag  
360  
gaactgcga gcctcttcga gcgccgcgga cgcgtcatcg agtgtgacgt ggtgaaagac  
420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac  
480  
ggcaaagaag tgaaggggcaa gcgcatcaac gtggaactct ccaccaaggg tcagaagaag  
540  
gggcctggcc tggctgtcca gtctggggac aagaccaaga aaccaggggc tggggatacg  
600  
gccttccctg gaactgggtg cttctctgcc accttcgact accagcaggc ttttggcaac  
660  
agcactggtg gctttgatgg gcaagcccg t cagcccacac cacccttctt tggtcgcgac  
720  
cgcagccctc tgcgccgttc acctccccga gcctcttatg tggctcctct gacggccag  
780  
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840  
tctgcctctt tgggtgttgg ctatcggact cagcccatga cagcccaggc agcctcttac  
900  
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960  
tcccagtctg ctgcagcttc ttcactcggc ccataatggtg gagcccagcc ctcagcctcg  
1020  
gccctttcct cctatggggg tcaggcagct gcagcttctt cgctcaactc ctatggggct  
1080  
cagggttctt cccttgccctc ctatggtaac cagccatcct cttacggcgc ccaggtgcc  
1140  
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1200  
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1260  
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1440  
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1560  
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1620  
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1680  
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1740  
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1800  
ccgcctatg agcgtaccg cctctcccca ccccgggcca gctacgacga tccctacaaa  
1860  
aaggctgtcg ccatgtcgaa aaggatggg tccgaccggc gtttagccga gctctctgat  
1920  
taccgccgtt tatcagagtc gcagctttcg ttccgccgt cgcgacaaa gtcctcgctg  
1980  
gattaccgtc gcctgcccga tgcccattcc gattacgcac gctattcggg ctctataat  
2040



gattacctgc gggcggtca gatgcactct ggctaccagc gccgcatgta gggccatcct  
 2100  
 gggatggggc accacagga gggagggaga aaagaggtgg gtagggttac agatccaggt  
 2160  
 tataactact ctggcccata cctttcctgg ttgtggtttt tcatgccctc taccatgtgg  
 2220  
 gccttcccca ggagatgac ctgttaagtg ttcggcagta acctactttg ttccttcgcc  
 2280  
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 2400  
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 2460  
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 2520  
 gccaaagtgt gccagcagtc cagggtaccc tgactgtccc tctgtagact gttgagactg  
 2580  
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 2640  
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 2700  
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 2760  
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 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

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Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
			20					25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
		50					55					60			
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65					70					75				80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90					95	
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100					105						110		
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
		115					120					125			
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
		130					135					140			
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145						150				155				160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

165										170				175			
Gly	Thr	Gly	Gly	Phe	Ser	Ala	Thr	Phe	Asp	Tyr	Gln	Gln	Ala	Phe	Gly		
180										185				190			
Asn	Ser	Thr	Gly	Gly	Phe	Asp	Gly	Gln	Ala	Arg	Gln	Pro	Thr	Pro	Pro		
195										200				205			
Phe	Phe	Gly	Arg	Asp	Arg	Ser	Pro	Leu	Arg	Arg	Ser	Pro	Pro	Arg	Ala		
210										215				220			
Ser	Tyr	Val	Ala	Pro	Leu	Thr	Ala	Gln	Pro	Ala	Thr	Tyr	Arg	Ala	Gln		
225										230				235			
Pro	Ser	Val	Ser	Leu	Gly	Ala	Ala	Tyr	Arg	Ala	Gln	Pro	Ser	Ala	Ser		
245										250				255			
Leu	Gly	Val	Gly	Tyr	Arg	Thr	Gln	Pro	Met	Thr	Ala	Gln	Ala	Ala	Ser		
260										265				270			
Tyr	Arg	Ala	Gln	Pro	Ser	Val	Ser	Leu	Gly	Ala	Pro	Tyr	Arg	Gly	Gln		
275										280				285			
Leu	Ala	Ser	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Ser	Ser	Leu	Gly	Pro		
290										295				300			
Tyr	Gly	Gly	Ala	Gln	Pro	Ser	Ala	Ser	Ala	Leu	Ser	Ser	Tyr	Gly	Gly		
305										310				315			
Gln	Ala	Ala	Ala	Ala	Ser	Ser	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Gly	Ser		
325										330				335			
Ser	Leu	Ala	Ser	Tyr	Gly	Asn	Gln	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Ala		
340										345				350			
Ala	Ser	Ser	Tyr	Gly	Val	Arg	Ala	Ala	Ala	Ser	Ser	Tyr	Asn	Thr	Gln		
355										360				365			
Gly	Ala	Ala	Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr		
370										375				380			
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala		
385										390				395			
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro		
405										410				415			
Tyr	Ala	Ala	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr			
420										425				430			
Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser	Gln	Pro	Ala	Ala		
435										440				445			
Tyr	Ala	Ala	Gln	Ala	Thr	Thr	Pro	Met	Ala	Gly	Ser	Tyr	Gly	Ala	Gln		
450										455				460			
Pro	Val	Val	Gln	Thr	Gln	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Ala	Ser	Met		
465										470				475			
Gly	Leu	Ser	Gly	Ser	Tyr	Gly	Ala	Gln	Ser	Ala	Ala	Ala	Ala	Thr	Gly		
485										490				495			
Ser	Tyr	Gly	Ala	Ala	Ala	Ala	Tyr	Gly	Ala	Gln	Pro	Ser	Ala	Thr	Leu		
500										505				510			
Ala	Ala	Pro	Tyr	Arg	Thr	Gln	Ser	Ser	Ala	Ser	Leu	Ala	Ala	Ser	Tyr		
515										520				525			
Ala	Ala	Gln	Gln	His	Pro	Gln	Ala	Ala	Ala	Ser	Tyr	Arg	Gly	Gln	Pro		
530										535				540			
Gly	Asn	Ala	Tyr	Asp	Gly	Ala	Gly	Gln	Pro	Ser	Ala	Ala	Tyr	Leu	Ser		
545										550				555			
Met	Ser	Gln	Gly	Ala	Val	Ala	Asn	Ala	Asn	Ser	Thr	Pro	Pro	Pro	Tyr		
565										570				575			
Glu	Arg	Thr	Arg	Leu	Ser	Pro	Pro	Arg	Ala	Ser	Tyr	Asp	Asp	Pro	Tyr		
580										585				590			
Lys	Lys	Ala	Val	Ala	Met	Ser	Lys										

595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
625	630	635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		640
	645	650
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		655
660	665	

<210> 1911  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

<400> 1911  
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 120  
 cgcattgacg atgaaagctt cctccgccca gttgagccga cccaagccgc accgtgggcg  
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 gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt  
 240  
 gaagcactgg tgggtccgct cgtcattgag gtggagggga aattcgcagg gcaggttaacc  
 300  
 ctgggaaaca ttcagcatgg cagcattcgc gattgctgg  
 339

<210> 1912  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 1912  
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 Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser  
 20 25 30  
 Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu  
 35 40 45  
 Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser  
 50 55 60  
 Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg  
 65 70 75 80  
 Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala  
 85 90 95  
 Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys  
 100 105 110  
 Trp

<210> 1913  
 <211> 767

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1913

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atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca  
120  
gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgcaa tctcatcggc  
180  
cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg  
240  
tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcctggcgt gaactggctc  
300  
tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg  
360  
cagaattgcy tcgcagccac ccggaccttg ccatcaaggt ggcccgcgcc accggaccag  
420  
cacgggtcct cctcaacctc gtcgatacgc gattgcgtct ggagctcat cgcgtccatg  
480  
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg  
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660  
ggcgccgtca tatcgcagtg ggaagcctgt ggatttgcca cgacgagaat ttccgcatte  
720  
atactcgcca ggctttgcat gccggtgccg aggttgtcgc cgcaccg  
767

&lt;210&gt; 1914

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1914

Met	Ser	His	Leu	His	Pro	His	Ile	Glu	Ser	Thr	Val	Ser	Phe	Val	Pro
1				5				10					15		
Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
		20						25					30		
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
		35				40						45			
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
	50				55						60				
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65				70				75						80	
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
			85					90					95		
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
		100					105				110				
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
	115					120					125				
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val

130	135	140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala		
145	150	155
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr		160
	165	170
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro		175
	180	185
		190

<210> 1915  
 <211> 571  
 <212> DNA  
 <213> Homo sapiens

<400> 1915  
 acgcgtccca ggccccacag gcccctctg gctctcaggc ccccgccca gtggccagga  
 60  
 aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca  
 120  
 ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc  
 180  
 tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgctcacag  
 240  
 gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccaccca gaacacatgg  
 300  
 agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac  
 360  
 ccaccgtgcg ggacccttgc gcctcaccgc gaacatccac agtgtgggac tgctgcgtct  
 420  
 caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg  
 480  
 atccctgagt ctcaccgcgc gcaccgcgcg tacctgccgc atccgccatg cgggaccct  
 540  
 gcgtctcacc caccgcaccc gccgtgcggg a  
 571

<210> 1916  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1916  
 Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg  
 1 5 10 15  
 Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His  
 20 25 30  
 Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu  
 35 40 45  
 His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys  
 50 55 60  
 Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu  
 65 70 75 80  
 Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro  
 85 90 95  
 His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

100  
Pro Pro His Pro Pro Cys Gly  
115

105

110

<210> 1917  
<211> 360  
<212> DNA  
<213> Homo sapiens

<400> 1917  
nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc  
60  
gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt  
120  
catccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg  
180  
gatttcgccg ccggatgggt gtcgaccgc ttggcagttc ccgtacatcg cacagtggcc  
240  
gactcccaa ggagacactt cccggtgact catttgcagt tcaatcgga gacaaccac  
300  
gtagacgtcg atgtcattga cgagcgcacg gtctgtgtat gtgttcggg ttcgccgga  
360

<210> 1918  
<211> 120  
<212> PRT  
<213> Homo sapiens

<400> 1918  
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr  
1 5 10 15  
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly  
20 25 30  
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser  
35 40 45  
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala  
50 55 60  
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala  
65 70 75 80  
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg  
85 90 95  
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg  
100 105 110  
Val Cys Val Pro Gly Ser Pro Glu  
115 120

<210> 1919  
<211> 354  
<212> DNA  
<213> Homo sapiens

<400> 1919  
nncggccgca gctgtgtcca ctgcgtgtc cctgccacct cggccatctg cctctctctt  
60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cacgcgcac cncggccacgc  
 120  
 ccacctccat cctctttgcc ccttactaaa cactggggagc ccgccccgcc gcgacaggcc  
 180  
 aggccagcgg gaagggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc  
 240  
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca  
 300  
 agctcgcggg caccgtatca tcccgtgccg tctccacct acccctgcca attg  
 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

Xaa	Gly	Arg	Ser	Cys	Val	His	Cys	Ala	Val	Pro	Ala	Thr	Ser	Ala	Ile
1				5					10					15	
Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
		35				40						45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55				60					
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65					70				75					80	
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
			85					90						95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105					110		
Pro	Tyr	Pro	Cys	Gln	Leu										
			115												

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact  
 60  
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac  
 120  
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgagggtgc  
 180  
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg tttcacccctc  
 240  
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct cccagatgac  
 300  
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcngtg tngtcca  
 357

<210> 1922

<211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 1922

Met	Val	Leu	Tyr	Thr	Gln	Gln	Pro	Leu	Ser	Ser	Arg	Asn	Leu	His	Gly
1				5				10					15		
Arg	His	Thr	Lys	Val	Asn	Ala	Thr	Arg	Arg	His	His	Thr	Asp	Val	Arg
			20					25					30		
Cys	Arg	Cys	His	Ser	Thr	Ala	Val	Gly	Arg	Pro	Gly	Ser	Pro	Ala	Pro
		35					40					45			
Pro	Gly	Phe	Thr	Leu	His	Thr	Ala	His	Pro	Ile	Leu	Leu	Ser	Gln	Ser
	50					55					60				
Pro	Leu	His	Arg	Ser	Leu	Pro	Asp	Asp	Phe	Met	Trp	Gly	Gln	Glu	Asn
65					70					75					80
Tyr	Arg	Ser	Trp	Leu	Arg	Arg	Ala	Xaa	Cys	Xaa	Pro				
				85					90						

<210> 1923  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

<400> 1923

nattnaatta tgggtgagaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca  
 60  
 ggtagtgcac agaagaaaga atggttcagc aacattaaac tctcaggcta tggaatgacc  
 120  
 cagtatcaat atactgatca agaggggaagc aaaggccatt catttaatatc gcgattgttc  
 180  
 ccgttgccct taaacggacg tatcttaaatt gacttttatt ggaaggcaca ggcccaattc  
 240  
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg  
 300  
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa  
 360  
 aatcccag  
 368

<210> 1924  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 1924

Met	Val	Arg	Lys	Gly	Leu	Cys	Val	Ala	Leu	Leu	Val	Leu	Val	Thr	Leu
1				5					10					15	
Ser	Gly	Ser	Ala	Gln	Lys	Lys	Glu	Trp	Phe	Ser	Asn	Ile	Lys	Leu	Ser
			20					25					30		
Gly	Tyr	Gly	Met	Thr	Gln	Tyr	Gln	Tyr	Thr	Asp	Gln	Glu	Gly	Ser	Lys
		35					40					45			
Gly	His	Ser	Phe	Asn	Leu	Arg	Leu	Phe	Pro	Leu	Pro	Leu	Asn	Gly	Arg
	50					55					60				
Ile	Leu	Asn	Asp	Phe	Tyr	Trp	Lys	Ala	Gln	Ala	Gln	Phe	Asn	Gly	Asn



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65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
      85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
      100            105            110
Pro Phe Thr Phe Glu Asn Pro
      115

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<210> 1925
<211> 427
<212> DNA
<213> Homo sapiens

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<400> 1925
actagtgttt ccagcaggca gcgatttaat tggtcttgca ttgaaaccca gtgtggcaag
60
ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgcccc
120
gggctcccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtctca caccagatgt ggcagccct
240
ccacgccagg ctgtgtggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct ggttccttag agcaaataga agcaccaggc tctgggtgcac
420
ggcgcgc
427

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<210> 1926
<211> 104
<212> PRT
<213> Homo sapiens

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<400> 1926
Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
 1              5              10              15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
      20              25              30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
      35              40              45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
      50              55              60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65              70              75              80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
      85              90              95
Asn Arg Cys Leu Leu Glu Thr Leu
      100

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<210> 1927
<211> 516

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1927

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nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcataaa
60
acatctgctt tgacgggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
120
ctttgtaact tccactcccc aaacttcttg aggatctcag aggtggaaat gagaggttcc
180
gaggatgctg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
240
acccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gactgcagga
300
ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaaa
360
atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
420
acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
480
acttacgagg aggccaaagc acagcccttc acgcgt
516

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&lt;210&gt; 1928

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1928

```

Xaa Leu Glu Asp Ser Thr Tyr Phe Ser Pro Asp Phe Gln Leu Tyr Ser
1      5      10      15
Gly Arg His Glu Thr Ser Ala Leu Thr Val Glu Ala Thr Ser Ser Ile
20     25     30
Arg Glu Lys Val Val Glu Asp Pro Leu Cys Asn Phe His Ser Pro Asn
35     40     45
Phe Leu Arg Ile Ser Glu Val Glu Met Arg Gly Ser Glu Asp Ala Ala
50     55     60
Ala Gly Thr Val Leu Gln Arg Leu Ile Gln Glu Gln Leu Arg Tyr Gly
65     70     75     80
Thr Pro Thr Glu Asn Met Asn Leu Leu Ala Ile Gln His Gln Ala Thr
85     90     95
Gly Ser Ala Gly Pro Ala His Pro Thr Asn Asn Phe Ser Ser Thr Glu
100    105    110
Asn Leu Thr Gln Glu Asp Pro Gln Met Val Tyr Gln Ser Ala Arg Gln
115    120    125
Glu Pro Gln Gly Gln Glu His Gln Xaa Gly Xaa Asn Thr Val Met Glu
130    135    140
Lys Gln Val Arg Ser Thr Gln Pro Gln Gln Asn Asn Glu Glu Leu Pro
145    150    155    160
Thr Tyr Glu Glu Ala Lys Ala Gln Pro Phe Thr Arg
165    170

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&lt;210&gt; 1929

&lt;211&gt; 843

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1929

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nnccgcggac actcagggtc tggggtcctt cttccccaag aggcctgact gcctgggtgt
60
tctccaggta catgtccttc aaggagaaat acacttcttg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc aggcctccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacgggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
360
tcattcttct ttttcttctt ggccccactc tcctctttga gggctctctg aggccccage
420
tccatggcgt cacagatgta tgtcagcaag ccatgctctc cgtcctctcc attctcgggg
480
gcagcctccc cggttggtgt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtgagc agtctcagtc tctccctcct gccaaagccgc caggggtccca ccctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgtgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtag tcatgcatgg tgcccacctc ccaggaccct gagcaggaca
840
caa
843

```

&lt;210&gt; 1930

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1930

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Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1          5          10          15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20          25          30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35          40          45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50          55          60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65          70          75          80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85          90          95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

```

100 105 110  
 Pro Leu Ser Ser Leu Arg Ala Leu  
 115 120

<210> 1931  
 <211> 719  
 <212> DNA  
 <213> Homo sapiens

<400> 1931  
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca  
 60  
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact  
 120  
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagttagat aaagcggaga  
 180  
 agcttcctac taggacagct tcctccagc ccagtgtggc cacgctggtg tcctcgggtga  
 240  
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc  
 300  
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcacatcatg  
 360  
 ttgcagagga agggaaggaa gccacaggct gccttgggga gctttctgaa aggcaggctc  
 420  
 gatcatgcct ctctgggcta cggctctctc acggtggctc ctggttgga ctgaagtgg  
 480  
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg gcggccccag  
 540  
 cagggtgcc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc  
 600  
 cagcgtcgcc ctcttcaggg agcctttcat aaccacctct cccttcact ggctaaagat  
 660  
 gaggttgagc aactgcagga cttgggacct tgttcctgcc cctgtggctg cctggatcc  
 719

<210> 1932  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1932  
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr  
 1 5 10 15  
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp  
 20 25 30  
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe  
 35 40 45  
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe  
 50 55 60  
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg  
 65 70 75 80  
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala  
 85 90 95  
 Trp Ile

<210> 1933  
 <211> 295  
 <212> DNA  
 <213> Homo sapiens

<400> 1933  
 ggcgcgcgagc tgtgggcggc catggagcgc atgcctgccg acctgattat cctcgacctg  
 60  
 atgctgccgg gggataacgg cctcttgctg tgccagcgcc tgcgccagca atacgcaaca  
 120  
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg  
 180  
 ggcgccgatg actacctgaa caaacctttc gatgcccggtg aattacttgc ccgggtgcgc  
 240  
 gctgtactgc gtccggcggtg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc  
 295

<210> 1934  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 1934  
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile  
 1 5 10 15  
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln  
 20 25 30  
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met  
 35 40 45  
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp  
 50 55 60  
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg  
 65 70 75 80  
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val  
 85 90 95  
 Ser Arg

<210> 1935  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 1935  
 accggtgtgg cgggcgcggc cttcaccacc atcggtccca ccgggccgac ggccgggttcg  
 60  
 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc  
 120  
 cccatcgctt cggcggttcgt gattgccag acccaatcgc tgcggagtt tttcctcagt  
 180  
 ggctcgatgg ccaaggtgct gaccttgctg tcggtgatcc tgatcctgat gctgcgccc  
 240

caaggggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg ttttaagca  
298

<210> 1936

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1936

Thr	Gly	Val	Ala	Gly	Ala	Ala	Phe	Thr	Thr	Ile	Gly	Ser	Thr	Gly	Pro
1				5					10					15	
Thr	Ala	Gly	Ser	Gln	Tyr	Ile	Val	Asp	Thr	Phe	Leu	Val	Val	Val	Phe
			20					25					30		
Gly	Gly	Ala	Gln	Ser	Leu	Phe	Gly	Pro	Ile	Ala	Ser	Ala	Phe	Val	Ile
		35					40					45			
Ala	Gln	Thr	Gln	Ser	Leu	Ser	Glu	Phe	Phe	Leu	Ser	Gly	Ser	Met	Ala
		50				55					60				
Lys	Val	Leu	Thr	Leu	Ser	Ser	Val	Ile	Leu	Ile	Leu	Met	Leu	Arg	Pro
65					70				75					80	
Gln	Gly	Leu	Phe	Ser	Ile	Lys	Val	Arg	Lys						
				85					90						

<210> 1937

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1937

gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa  
60  
gcctttaatt ctcccaattt atttcaaatt catcaaagaa ctcacactgg aaagaggtcc  
120  
tataaatgta gggaaatagt gagagccttc acagttttcca gtttctttcg aaaacatgga  
180  
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat  
240  
cccagtttat ttcaaattca tgttagaact cactctggag aaaaacccta caaatgtaaa  
300  
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac  
360  
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc  
420  
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac  
480  
caagtcttta gatgtccac gtcccttcac gcg  
513

<210> 1938

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1938

Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

```

      1           5           10           15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln
      20           25           30
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg
      35           40           45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr
      50           55           60
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr
      65           70           75           80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro
      85           90           95
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val
      100          105          110
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys
      115          120          125
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His
      130          135          140
Glu Arg Thr His Ser Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp
      145          150          155          160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala
      165          170

```

&lt;210&gt; 1939

&lt;211&gt; 1233

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1939

```

gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgagggtgcc aagcatcatg ctggttgatg tcctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta gggtatatct taagtgtggt gctgctaaca ttgccaggc
300
agcatctggt tcagctttat ctatatTTTT tgactgctct gtcctctat gctggacatc
360
aaatttccag ggactatggt cggagtgaac tggggtttgc ctatgaggga ccaatgtatt
420
tagaacctct ctctatgaat cgggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tggttcaggt agtgaggga tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tgttcttttc atggttttct
780

```

ggctcgctctt atttgctctt cagattttact cctatttcag tactcgagat cagcctgcat  
 840  
 cacgtgagag gcttctttttc ctttttctga caaggtaatt aataagagcc tatgatacta  
 900  
 tatataacct tagaaagaga aaactttgat cttaggaatag taagttttgc agattacttt  
 960  
 tatcgttcat gttacacaac ttcgtatttt gttaagatag gattttcatt cactggatac  
 1020  
 ctaggtttgg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat  
 1080  
 ggaccagagt gtagcaaagt atttgtggaa aggtacatag cacatcgtaa aagtattttt  
 1140  
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt  
 1200  
 tattgagtat tttaaagtga ccataccatt naa  
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1				5					10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
			35				40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
			50			55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70					75				80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
				85					90					95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
			100					105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
			115				120						125		
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
			130			135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155				160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Asn	Lys	Phe	Ala	Met	
				165					170				175		
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
			180					185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
			195				200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
			210			215					220				
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235				240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg



245 250 255  
 Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg  
 260 265

<210> 1941  
 <211> 411  
 <212> DNA  
 <213> Homo sapiens

<400> 1941  
 ctggggccct gccccacagc atcatgatgg ggaaactccc cctggggggtc gtctccctt  
 60  
 atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact  
 120  
 gcacagccta cggtcgggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct  
 180  
 acaaatcaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc  
 240  
 cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc  
 300  
 ccctggagggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag  
 360  
 gctatgggcg ggagaagccc agtgcgggtc cccccaccaa ggagggtccg a  
 411

<210> 1942  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 1942  
 Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met  
 1 5 10 15  
 Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr  
 20 25 30  
 Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His  
 35 40 45  
 Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln  
 50 55 60  
 Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln  
 65 70 75 80  
 Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val  
 85 90 95  
 Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser  
 100 105 110  
 Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val  
 115 120 125  
 Arg

<210> 1943  
 <211> 386  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga  
60  
gtcttttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc  
120  
acacagatgt acatggcata gcaactgccc aaagtatcag cccaaggaac cctactttcc  
180  
ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc  
240  
caggggtat tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact  
300  
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc  
360  
ctctgcaatc tcacctgcta gagacg  
386

&lt;210&gt; 1944

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10					15	
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50				55					60					
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65				70					75					80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
			85				90						95		
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
		100					105						110		

&lt;210&gt; 1945

&lt;211&gt; 443

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1945

nacgcgtcac gaagcgcgct cggccccacgt ggctccaagg gcgtccacgc gcccctcctc  
60  
gaccgattgg tgtcgaacat ggcacgggtgg catgcgacgc gcaccaagat ccagctcaag  
120  
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg  
180  
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc  
240  
gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt  
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg  
 360  
 atccgcgagc cgatgatgcg cattattcat gcggctcatc gcacagaggt gaaggaacta  
 420  
 catgtgctcc aaaacatgct gaa  
 443

<210> 1946  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<400> 1946  
 Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His  
 1 5 10 15  
 Ala Pro Leu Leu Asp Arg Leu Val Ser Asn Met Ala Arg Trp His Ala  
 20 25 30  
 Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met  
 35 40 45  
 Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile  
 50 55 60  
 Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr  
 65 70 75 80  
 Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu  
 85 90 95  
 Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly  
 100 105 110  
 Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile  
 115 120 125  
 Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln  
 130 135 140  
 Asn Met Leu  
 145

<210> 1947  
 <211> 472  
 <212> DNA  
 <213> Homo sapiens

<400> 1947  
 cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgcgtg taggcggggag  
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 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa  
 120  
 gcgcccgcgtg gggcacggat gtgcgaggcg ccgagctgca gctctggggc atgaggctct  
 180  
 gcagcagggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg  
 240  
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg  
 300  
 ccatgaggaa ctctgcagg gacacgggtg ggttggccga ggcccgcgtcc aagggtgacct  
 360  
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag  
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag  
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

```

Met Arg Thr Leu Phe Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro
 1           5           10           15
Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val
 20           25           30
Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe
 35           40           45
Leu Met Ala Glu Glu Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala
 50           55           60
Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Thr Arg Leu Cys Trp
 65           70           75           80
Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln
 85           90           95
Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Val
100           105           110
Glu Ala Ala Cys Ala Phe Cys Phe His Leu Thr Leu Leu His Leu Arg
115           120           125
His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr
130           135           140
Val Thr Ala Tyr Thr Ala
145           150

```

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

```

acgcgttgag ggagggcaca tgcttcatga gcgcttggcg ccactgctca agcgacatct
60
gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacgggacg ctcacaagct tccattggcc attcgcggtt cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgcc aatggcattc
240
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcttggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc ggggtt
395

```

<210> 1950

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
          20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
          35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
          50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
          85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
          100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
          115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cgggcgccgc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcggaac cggctcgggtg ccctcggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttccg ggccagcgga gccacctcgt attcgtctga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
          20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
          35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgcggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1      5      10      15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20      25      30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35      40      45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50      55      60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65      70      75      80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85      90      95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100      105

```

<210> 1955  
 <211> 415  
 <212> DNA  
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccga caaggtacta tcacacatgg  
60  
tggaatactg ctggggggcgc ttacagaca acatcaaata cgctgtagct gcccaatatt  
120  
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa  
180  
ccgcaaaca agccatgaac gcagcaaac aattccactg gaacaccgga ctacaacaac  
240  
aatggaaaac atggatactc ccagtcacac acggcaccgt gtccgagttt ttcaccaaac  
300  
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa  
360  
acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac  
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
			20					25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65				70					75					80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85					90						95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cgggtgaccac  
60  
caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg  
120  
gggaggaggc ccgccggggc cgcagtgggc gaggggcccct tggcgcgctc ctgggaggtc  
180  
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc  
240  
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt  
300

ggggaccctg ggggaaggcgc caacttctct cctctgccca cctcactccc cgcgggcgtc  
 360  
 cctggggcgc ctgcccgggc cgactgggc ggcctccatc gtcccttccc tctacctgca  
 420  
 ctgccccagg cgggagagag gccttgcccc nncgaggac cagctgcagc gggcagcggg  
 480  
 gtctgtctcc cccaaccccc gccccatggc acggggctga accggt  
 526

<210> 1958  
 <211> 175  
 <212> PRT  
 <213> Homo sapiens

<400> 1958  
 Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro  
 1 5 10 15  
 Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser  
 20 25 30  
 Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala  
 35 40 45  
 Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr  
 50 55 60  
 Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg  
 65 70 75 80  
 Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala  
 85 90 95  
 Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu  
 100 105 110  
 Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala  
 115 120 125  
 Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala  
 130 135 140  
 Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Ala Gly Ser Gly  
 145 150 155 160  
 Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg  
 165 170 175

<210> 1959  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 1959  
 gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcgggaaggc tcacccgagt  
 60  
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatcccac gacatggtga  
 120  
 acggctggga ggagacctg tccccgtcgg tcttggcgcc gacaacaaca ccgtcatgg  
 180  
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagt  
 240  
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct  
 300



cgtctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga  
 360  
 agtcgacgcg caacgcgt  
 378

<210> 1960  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 1960  
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu  
 1 5 10 15  
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser  
 20 25 30  
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala  
 35 40 45  
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly  
 50 55 60  
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys  
 65 70 75 80  
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro  
 85 90 95  
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala  
 100 105 110

<210> 1961  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 1961  
 ggatccaccc cggaaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg  
 60  
 tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag  
 120  
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcacc aggaccacgg  
 180  
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac  
 240  
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg  
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 360  
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 384

<210> 1962  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 1962  
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

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1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
115          120          125

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&lt;210&gt; 1963

&lt;211&gt; 323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1963

```

nnncccttcc taccctccca tactccccac ccctcttccct cccctgtgac tgagcttgca
60
ggcatgaaac acccacctgg cctctctccc tctgttttgc cccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtcc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcatgcata tcgcggggccc ccttcagacc tctcgggggc atcttccctc
240
tccttgacca ttatttttct tcattctgggc tgggcccgga ggggcgttcc ccccttccct
300
cttctttctt tttttttctc ttt
323

```

&lt;210&gt; 1964

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1964

```

Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

```

100

105

<210> 1965  
<211> 1416  
<212> DNA  
<213> Homo sapiens

<400> 1965  
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60  
agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct  
120  
gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct  
180  
cgggccctgt cactgacacg ggactggag gaggagcagg aggcacgtga ggagctggag  
240  
cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc  
300  
ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat  
360  
ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg  
420  
cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt  
480  
gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagagggtg  
540  
gagcgggatg aggagcggaa gcagcgcaact ctggccgtgg ctgcccga gaagctggag  
600  
ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg  
660  
gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag  
720  
acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaaaa ggcctcaag  
780  
ggcctggagg ctgagggtgt gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg  
840  
cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc  
900  
aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa  
960  
gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc  
1020  
ctgcaggtag agtcaactgac cacagagctg tcagctgagc gcagtttctc agccaaggca  
1080  
gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag  
1140  
gaggatgctg gggcccgctc ccgccacaag atgaccattg ctgccctga gtctaagttg  
1200  
gcccaggctg aggagcagct agagcaagag accagagagc gcacccctc tggaaagctg  
1260  
gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg  
1320  
gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag  
1380

cggcagctgg aggaggccga ggaggaggca tcccgg  
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
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Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
		20						25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
	35					40						45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
50					55					60					
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu	
65				70				75						80	
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
		85						90						95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
		100						105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
	115						120					125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
130					135						140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145				150						155				160	
Asp	Glu	Ala	Gly	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg	
		165						170					175		
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
	180						185						190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
	195						200					205			
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
210					215						220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225				230						235				240	
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
		245						250					255		
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
	260						265						270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp	
	275					280					285				
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
290					295						300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310					315				320	
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
		325						330					335		
Arg	Lys	Leu	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala
		340					345					350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

```

          355          360          365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
   370          375          380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385          390          395          400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
          405          410          415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
          420          425          430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
          435          440          445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
          450          455          460
Glu Ala Glu Glu Glu Ala Ser Arg
465          470

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&lt;210&gt; 1967

&lt;211&gt; 401

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1967

```

aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctggt tgcggcggtg
60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaaggga
120
tgcatacat ctcgcggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc
180
ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
240
tagtgactg taccgatct catttggtg accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgctcatc tctagatatg
360
caaacggccg gggttttcat gcgctcgaga agctgatgct g
401

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&lt;210&gt; 1968

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1968

```

Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
 1          5          10          15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
          20          25          30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
          35          40          45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
          50          55          60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65          70          75          80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

```

85

90

<210> 1969  
 <211> 464  
 <212> DNA  
 <213> Homo sapiens

<400> 1969  
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 60  
 gaggtcgccg ttcaccgcgt cacggatgct gtcaccctgc tcggtcacgt cgccaacacc  
 120  
 caggtcatgg cgaccagcg tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg  
 180  
 gaaggacttc ctgtatcaat gatggaggtt gcttccctcg gtatcccat tatcgcgact  
 240  
 ggcgtcggcg gagtaggaga aatcgtctcg tctgacaacg ggcatttatt gcctgccgag  
 300  
 ttcaccgaca cccaggcacc tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag  
 360  
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagttccg cgctctgtc  
 420  
 gtctaccccg aattctgtcg cgagtgtctg ggcgacgtg atca  
 464

<210> 1970  
 <211> 154  
 <212> PRT  
 <213> Homo sapiens

<400> 1970  
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp  
 1 5 10 15  
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr  
 20 25 30  
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp  
 35 40 45  
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro  
 50 55 60  
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr  
 65 70 75 80  
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu  
 85 90 95  
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln  
 100 105 110  
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser  
 115 120 125  
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu  
 130 135 140  
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp  
 145 150

<210> 1971  
 <211> 520

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1971

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accggttgta ggtgtacaaa cactgctgac atcagccagc tcctgagtgt caggagagac
60
acagaagtac tcaggttggt tgtgtgttga ccgagagAAC agctcagatt gaggaacgag
120
acagacgacg acaaaaacaa ttagagcatc agttgataca atacaaatgg aatataatgc
180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggt gtaatgacca
480
gtgtaatcag ttcacaagaa ttgagaaaca aacaaaacag
520

```

&lt;210&gt; 1972

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1972

```

Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
1           5           10           15
Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
20           25           30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
35           40           45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
50           55           60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
65           70           75           80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
85           90           95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
100          105          110
Glu Lys Gln Thr Lys Gln
115

```

&lt;210&gt; 1973

&lt;211&gt; 331

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1973

```

acgcgtacct atgcccagcg catggcggat cagttgacgg eggcactagg cagctactta
60

```

tccgcaggtc aaaagaaatc ggacggcctc ggatccttct tcgtggccac tacccttgaa  
 120  
 gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc  
 180  
 cccgctcgat ctttctccgc ttggggcgtg cgcggaacga ctttttctgc gccgtcgatg  
 240  
 acaaaggctt cccgctcgag ctcgggccgca ccaagcgcac cgcgtcgctg tggcaaaaagc  
 300  
 tggcgtcgc cgccagtga atcgtgtgca c  
 331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

Met	Ala	Asp	Gln	Leu	Thr	Ala	Ala	Leu	Gly	Ser	Tyr	Leu	Ser	Ala	Gly
1				5					10					15	
Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
			20					25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35					40					45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55				60					
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65					70					75				80	
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85						90					95	
Pro	Pro	Val	Lys	Ser	Cys	Ala									
						100									

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 gtctgacggc ttggaccgat gcgctgggtg caatgggcgc caagctgagc caggcgtggg  
 120  
 agaaggcggg tgccgacacg gcgagccgctc agcaggagat ttgcgatgcg ctggcgcaga  
 180  
 ctgcgcgcga catctcttcg caaacacagg cccacgcaa caacacgata gccgagattt  
 240  
 ctcgactggt gcaggccgcc tcggaggcgc caaaggctgc tgccgaagtg gttgccgagc  
 300  
 tgcgccagaa gctgtccgac agcatggtcc gcgacacggg cgatgctgga agaacgcacg  
 360  
 cgcatgctgg  
 370

<210> 1976



<211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 1976  
 Met Arg Val Arg Ser Ser Ser Ile Ala Arg Val Ala Asp His Ala Val  
 1 5 10 15  
 Gly Gln Leu Leu Ala Gln Leu Gly Asn His Phe Gly Ser Ser Leu Trp  
 20 25 30  
 Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val  
 35 40 45  
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg  
 50 55 60  
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg  
 65 70 75 80  
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile  
 85 90 95  
 Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu  
 100 105 110  
 Gln Leu His Glu Arg Leu Ala Arg Arg  
 115 120

<210> 1977  
 <211> 551  
 <212> DNA  
 <213> Homo sapiens

<400> 1977  
 ccgcggggcag gtggcatgtg ggctgagccc cgaagaaagt caaaagataa ggaagaggac  
 60  
 aggttttctag gaagaagttg gctgagcagg agttgggcag gttaagagct gggtgagggg  
 120  
 agagaggaga caggcagcca ggctgttaca cagggaggag cacaggaggt gcacgggagg  
 180  
 agccaagcgg gagggcaggc aatggccagg ttggaagatc tgcacctccc tggttactgg  
 240  
 aggaatgaaa ctggttggac tgactgcagg gagaggctcc agttgaaaca tgagagaagt  
 300  
 actggatgaa aaaggtgcc aactgagac cagaaggcag attcctgaac tgggtggggtg  
 360  
 ccaaggatgc atatcaaaga ctgctggaac atgtgggtat caagattgaa gacagtgaag  
 420  
 gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactggtgac tgctcttccc  
 480  
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 540  
 cagactcatg a  
 551

<210> 1978  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 1978

```

Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
 1          5          10          15
Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
          20          25          30
Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
          35          40          45
Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
          50          55          60
Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
65          70          75          80
Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
          85          90          95
Gln Pro Thr Ser Ser
          100

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&lt;210&gt; 1979

&lt;211&gt; 5530

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1979

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ncttgactca atcctgcaag caagtgtgtg tgtgtcccca tcccccgccc cgtaaacttc
60
atagcaaata acaaataccc ataaagtccc agtcgcgagc cccctccccg cgggcagcgc
120
actatgctgc tcgggtgggc gtccctgctg ctgtgcgcggt tccgcctgcc cctggccgcg
180
gtcggccccg ccgcgacacc tgcccaggat aaagccgggc agcctccgac tgctgcagca
240
gccgcccagc cccgccggcg gcagggggag gaggtgcagg agcgagccga gcctcccggc
300
cacccgcacc ccctggcgca gcggcgagc agcaaggggc tgggtgcagaa catcgaccaa
360
ctctactccg gcggcgga ggtgggctac ctctgtctac cgggcgccg gaggttcttc
420
ttggacctgg agcgagatgg ttccgtgggc attgctggct tcgtgcccgc agggaggcgg
480
acgagtgcgc cctggcgcca ccggagccac tgcttctatc ggggcacagt ggacgctagt
540
ccccgtcttc tggctgtctt tgacctctgt ggggggtctc acggcttctt cgcgggtcaag
600
cacgcgcgct acaccctaaa gccactgctg cgcgaccct gggcggagga agaaaagggg
660
cgcgtgtacg gggatgggtc cgcacggatc ctgcacgtct acaccgcag ggcttcagct
720
tcgaggccct gccgcgcgc gccagctgcg aaacccccgc gtccacaccg gaggcccacg
780
agcatgctcc ggcgcacagc aaccgagcg gacgcgcagc acgcctcgca gctcttgagc
840
cagtccgctc tctcgcccgc tgggggctca ggaccgcaga cgtggtggcg gcggcggcgc
900
cgctccatct cccgggcccc ccaggtggag ctgcttctgg tggctgacgc gtccatggcg
960

```

cggttgatg gceggggcct gcagcattac ctgctgaccc tggcctccat cgccaatagg  
1020  
ctgtacagcc atgctagcat cgagaaccac atccgcctgg ccgtggtgaa ggtgggtggg  
1080  
ctaggcgaca aggacaagag cctggaagtg agcaagaacg ctgccaccac actcaagaac  
1140  
ttttgcaagt ggcagcacca acacaaccag ctgggagatg accatgagga gcactacgat  
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&lt;210&gt; 1980

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1980

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Gln Pro Pro Thr Ala Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly
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Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu
50           55           60
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu
65           70           75           80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg
85           90           95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly
100          105          110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser
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His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala
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Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu
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Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala
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Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg
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260          265          270
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275          280          285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala
290          295          300
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305          310          315          320
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325          330          335
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355          360          365
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370          375          380
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly
385          390          395          400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly
405          410          415
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420          425          430
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1497

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<210> 1981  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

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 Ser Pro Pro Lys Ala Ala Gly Gly Arg Cys Pro Gly Pro Cys Arg  
                          50                      55                      60  
 Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Gly Arg Gly Arg  
 65                      70                      75                      80  
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<210> 1983  
 <211> 383  
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&lt;210&gt; 1984

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 1984

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		20						25					30		
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35					40					45			
Phe	Ile	Asp	Ile	Ile	Gly	Ser	Thr	Lys	Leu	Ser	Leu	Glu	Tyr	Asp	Ser
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Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
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Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
				85					90					95	
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
			100				105						110		
Ala	Ser	Leu	Tyr	Cys	Ala	Arg	Val	Val	Met	Asn	Arg	Phe	Asp	His	
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&lt;210&gt; 1985

&lt;211&gt; 381

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 1985

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<210> 1986

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1986

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		20						25					30		
Ile	Glu	Phe	Arg	Met	Gln	Asn	Ile	Ser	Ser	Val	Leu	Val	Gln	Met	Gly
		35				40						45			
Leu	Asp	Arg	Ile	Lys	Gly	Tyr	Lys	Ala	Cys	Glu	Pro	Met	Trp	Gly	Pro
	50				55					60					
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Phe	Glu	Ser	Asp	Glu	Thr	Ala	Gln	Thr	Ala	Asp	Glu	Gln	Thr	Leu	Ile
			85					90					95		
Arg	Arg	Ala	Asn	Lys	Leu	Gln	Leu	Lys	Arg	Phe	Asp	Gln	Val	Pro	Asp
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<210> 1987

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1987

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<210> 1988

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1988

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Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg
           35           40           45
Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg
           50           55           60
Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala
65           70           75           80
Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly
           85           90           95
Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys
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<210> 1989

<211> 10795

<212> DNA

<213> Homo sapiens

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Ser Ser Pro Met Pro Ile Pro Asn Ser Ser Pro Leu Ala Ser Pro Val

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&lt;211&gt; 3102

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 aacgtcgaaa acctctctaa cgaaggccga gcaaagctac gccgtcaatc ccttggtttc  
 240  
 gtcttccaac aaggaatgct cgtacccgag ctactgctg tcgagaacac cgccctaccc  
 300  
 ctcatgctta acggcgtatc ccaaaccgat gcggtcaggt atgccacca atggcttgaa  
 360  
 tcgatggggg taggcggcat ggaggatcgt cggattgggt agctctccgg gggccaagct  
 420  
 caacgcgtca ctattgcccg gtcccaggta atcgatccgt cgattgtctt cgctgacgaa  
 480  
 cccaccggag ccctcgactc agccaccgcc gtcgaagtca tggccattct gctttcggcg  
 540  
 acgaccgggc ggggacgcac cctcgtcgtc gtcacccatg acgaggacgt tgcccgccgc  
 600  
 tgccagcgca tccttcatct gcacgacggg cggatcgtct ctgaccacgt acgtcattcc  
 660  
 gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa  
 720  
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 780  
 ctgcgatcct cagcatgacc ctccgtgcct cagccgctga ccactccacc tggcggttgc  
 840  
 cggtagttgc tttcgtgtc attgcaacca tcctcctcga cgtcactggc ggtgccgtca  
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 957

<210> 1994  
 <211> 224  
 <212> PRT  
 <213> Homo sapiens

<400> 1994  
 Xaa Lys Thr Tyr Gly Met Thr Arg Ala Leu Asp His Ile Asp Ile Ala  
 1 5 10 15  
 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

35                      40                      45  
 Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys  
 50                      55

<210> 1997  
 <211> 313  
 <212> DNA  
 <213> Homo sapiens

<400> 1997  
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 120  
 ggtggcgga tccggttttta cgacggcctg ttcggggcgg gtaccggcag tttcctgatg  
 180  
 ttcctgttcg tgcgggttttt gcgttttgat ttcttgcatt cttctgccgc ggccaagggt  
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 300  
 tatggctacg cgt  
 313

<210> 1998  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 1998  
 Pro Leu Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg  
 1                      5                      10                      15  
 Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg  
 20                      25                      30  
 Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp  
 35                      40                      45  
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val  
 50                      55                      60  
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Lys Val  
 65                      70                      75                      80  
 Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser  
 85                      90                      95  
 Gly Asn Val Leu Tyr Gly Tyr Ala  
 100

<210> 1999  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 1999  
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 120

ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat  
 180  
 gtgattatgt ctgtgaagtc caagactatg gtcgggcagt tggttgacta tggccgtata  
 240  
 acttttcgttg atatgaccgg ctctattacg caggggtcaaa acgatgcagc tcaggttgtg  
 300  
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct  
 360  
 ggaaagccca tggatgacat cgattcgtcc ttaaagctt  
 399

<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
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Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20						25					30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50				55					60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65				70					75					80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
				85					90						

<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

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 120  
 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tccccctccac  
 180  
 tacgctgccg cttctgacac ttacaggnag agcggaaacc catacacctt ccagccatga  
 240  
 tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg  
 300  
 gagttcttac tggataacgg tgcagacccc tccctgcggg acaggcaggg ctacacagct  
 360  
 gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgctctt agaaatgtcc  
 420  
 tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc  
 480  
 tacaacggtc actgtgaagc cttgaagacg ctggcggaga cgctgggtgaa tctggacgta  
 540



agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggttc tactgagtgt  
 600  
 gtggaggtgc ttacagccca cggcgccctct gccctcatca aggagcgcaa gcgcaagtgg  
 660  
 acacccttgc acgccgttgc tgccctctggc cacactgact ccctgcactt gctgatcgac  
 720  
 agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg  
 780  
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 840  
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 900  
 gaggactgcc tggtgccct gctggaccac gacgcatttg tgctgtgccg agactttaag  
 960  
 ggccgcacgc ccattcacct ggcctcagcc tgtggccaca ctgcagtact gcggaccctg  
 1020  
 ctgcaggctg ccctttccac agatcccctg gatgccgggg tggattacag cggataactcg  
 1080  
 cccatgcact gggcctccta cactggacat gaagattgtc tggagttggt acttgaacac  
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 1200  
 aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc  
 1260  
 cgagatgcc aaggacggac ccccttcac gccgctgcct tcgcggaaca tgtctctggg  
 1320  
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcc a ctgaccacac tggccgcact  
 1380  
 gcgctcatga cggcggtga gaacgggcag accgctgctg tggaatttct gctg  
 1434

<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
1				5					10					15	
Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
		35					40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55					60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70				75						

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

ntcagtacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcgatgtg  
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 120  
 ttgagcaaag agaggggaaaa caaaatgcat ttctatgaca tcattttccag ggaggaaaaa  
 180  
 ggaagaaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa  
 240  
 tttgaagtcc agagtcagaa tgagtatatt gctaacctca aggaccaact gcaagagatg  
 300  
 aaggcaaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc  
 360  
 cagacccaga aaaagtgtaa cagaacagag gaactcttgg tggaagagat tgagaaactc  
 420  
 aggatgaaaa ccgaagaaga ggcccggact catacagaga ttgaaatgtt ccttagaaaag  
 480  
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 540  
 atactgagga aacaaaaaga atattttgaa ggaaaaccaa ccatcattct ttcagcctaa  
 600  
 tgaactttag ctcatgtttt ctttcagggt tatgcatctg aatagatatc ttatatagct  
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 gtaatttgag agagtgcagg taaaattg  
 688

&lt;210&gt; 2004

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2004

Xaa	Met	Thr	Thr	Glu	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1				5					10					15	
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35					40						45		
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50					55					60				
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65				70					75					80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85						90					95	
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
			100					105						110	
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
		115					120						125		
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130					135					140				
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145				150						155				160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005  
 <211> 354  
 <212> DNA  
 <213> Homo sapiens

<400> 2005  
 gctagcacca agccaagggt atgtttcctt gcttgcattgt ggggtttctg gccagtcagc  
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 caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttgggtca  
 120  
 tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga  
 180  
 agcccgccgt gtcacagggt ctctgaccg gctgggtagg gtttggcctt atcttacagc  
 240  
 cagtgtgtgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat  
 300  
 gtctactccc tgctttggtc tgtcctgaaa acaattgcaa agacattgtg gctg  
 354

<210> 2006  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2006  
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu  
 1 5 10 15  
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu  
 20 25 30  
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe  
 35 40 45  
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly  
 50 55 60  
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg  
 65 70 75 80  
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu  
 85 90 95  
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala  
 100 105 110

<210> 2007  
 <211> 335  
 <212> DNA  
 <213> Homo sapiens

<400> 2007  
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg  
 60  
 tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcatgcg  
 120  
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcatg  
 180  
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg  
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggt  
 300  
 ttgagtattg ctggtaggca gggacaactt tccgt  
 335

<210> 2008  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 2008  
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val  
 1 5 10 15  
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa  
 20 25 30  
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met  
 35 40 45  
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile  
 50 55 60  
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val  
 65 70 75 80  
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe  
 85 90 95  
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser  
 100 105 110

<210> 2009  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

<400> 2009  
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 60  
 ctgcgttccc caccgacat cgacgtgggc gtcggcatgg aggctcgagg cttectcttc  
 120  
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtgcgcaa gccggggaag  
 180  
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gaccctcacc  
 240  
 gtccaccagt acgcatcaa gccgggggtcg cgcgtcatca tcgtcgac  
 288

<210> 2010  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2010  
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile  
 1 5 10 15  
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly  
 20 25 30  
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

BNSDOCID: <WO 0058473A2 | >

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2013

gcgtatcccc acggctacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa  
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gccttgctcg cccaggtcca cagcacacaa acccgggtgt acctggccaa tatcaatgcc  
120  
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc  
180  
cgcggaacg gcgtcgccaa acgcttggcc gtcagcgtgc cgtcccattg tgcgctgctg  
240  
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccgncn  
300  
nnncccn  
309

&lt;210&gt; 2014

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
		20						25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
		35					40					45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65					70					75				80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
				85					90					95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
				100											

&lt;210&gt; 2015

&lt;211&gt; 329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2015

acgcgtgcca tgctcgggtat ccgcccgcac caccctgtct ttgggaccgg cgagttcacc  
60  
gatctagggc ggccggacat ggcagtgatg tccttcttac gtcacaacga gcacgaaacg  
120  
gtcctgtgcc tggctaactc ctccgatact gagcggacgg ttgcccttca ccttcacaa  
180  
ttcgcggggc tggcgggctc ttctctcatc catggtcagg acgcgcaacc agtaaaagct  
240  
gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt  
300

gaggagaggt catgaccgct tgggaagac  
329

<210> 2016

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2016

Thr	Arg	Ala	Met	Leu	Gly	Ile	Arg	Arg	His	His	Pro	Val	Phe	Gly	Thr
1				5					10					15	
Gly	Glu	Phe	Thr	Asp	Leu	Gly	Gly	Pro	Asp	Met	Ala	Val	Met	Ser	Phe
			20					25					30		
Leu	Arg	His	Asn	Glu	His	Glu	Thr	Val	Leu	Cys	Leu	Ala	Asn	Leu	Ser
		35					40					45			
Asp	Thr	Glu	Arg	Thr	Val	Ala	Leu	His	Leu	Pro	Gln	Phe	Ala	Gly	Val
	50					55					60				
Ala	Gly	Ser	Ser	Leu	Ile	His	Gly	Gln	Asp	Ala	Gln	Pro	Val	Lys	Ala
65					70				75					80	
Asp	Gly	Thr	Leu	Ser	Val	Pro	Leu	Trp	Pro	Tyr	Gly	Tyr	Arg	Trp	Leu
				85				90						95	
Gln	Met	Ser	Gly	Glu	Glu	Arg	Ser								
				100											

<210> 2017

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2017

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ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca  
120  
ggcgacaagc tactggccat tgacaatata cgcttgaca actgccccat ggaggacgcc  
180  
gtgcaaattc tgcggcagtg cgaggacctg gtgaagctga agatccgga ggacgaggac  
240  
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgctac  
300  
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc  
360  
tcaggcctcc ccaaactgtg cctggctgag aggactggtg ccatccagtg ggggaaccgc  
420  
ttcggaccat aacaacgtta ttctcaggga cggacca  
457

<210> 2018

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2018

Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

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      1             5             10             15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20             25             30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35             40             45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50             55             60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65             70             75             80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85             90             95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100            105            110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115            120            125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130            135            140

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<210> 2019  
 <211> 483  
 <212> DNA  
 <213> Homo sapiens

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<400> 2019
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120
gactatctca acgtcatcag gggacatatc gacaccgatc ccggcctgac cgacgtcatc
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cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
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accagcttcc ccgtcttcca tgccgccaaa attcaggatg tcgccaccgc ccggcatgcy
300
attgccgccc gcaaggtcga catgatcggc atgacccgcg cccacatgac cgatccgcat
360
atcgctccgca agatcatgga aaaacaggag gaggacatcc gcccttgcgt cggcgccaat
420
tattgtcttg atcgcattha tcaaggcggc ctgccttct gcattcacia tgcggcaacc
480
ggc
483

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<210> 2020  
 <211> 161  
 <212> PRT  
 <213> Homo sapiens

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<400> 2020
Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
1             5             10             15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20             25             30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

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<210> 2021
<211> 797
<212> DNA
<213> Homo sapiens
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<210> 2022

<211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2022

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Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
 1           5           10           15
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
      20           25           30
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Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
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Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
65           70           75           80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
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Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
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 <212> DNA  
 <213> Homo sapiens

<400> 2023

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 <213> Homo sapiens

<400> 2024

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His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
      50           55           60
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
      65           70           75           80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
      85           90           95
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
      100          105          110
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
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Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
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&lt;211&gt; 872

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2025

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<213> Homo sapiens

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&lt;210&gt; 2030

&lt;211&gt; 794

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2030

Met	Arg	Val	Arg	Ile	Gly	Leu	Thr	Leu	Leu	Leu	Cys	Ala	Val	Leu	Leu
1				5				10						15	
Ser	Leu	Ala	Ser	Ala	Ser	Ser	Asp	Glu	Gly	Ser	Gln	Asp	Glu	Ser	
			20					25				30			
Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val	Lys	Asp	His
		35				40						45			
Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe	Leu	Asp	Ser	Glu
	50				55					60					
Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu	Glu	Asp	Ser	Leu	Lys
65					70				75					80	
Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp	Ile	Ser	Phe	Leu	Glu	Ser

1541

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      515              520              525
His Ala Ser Gly Thr Gly Val Met Arg Ser Cys His Thr Ala Val Glu
  530              535              540
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met
  545              550              555              560
Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile
      565              570              575
Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn
      580              585              590
Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn
      595              600              605
Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln
      610              615              620
Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly
  625              630              635              640
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu
      645              650              655
Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr
      660              665              670
Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys
      675              680              685
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro
      690              695              700
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr
  705              710              715              720
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp
      725              730              735
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala
      740              745              750
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp
      755              760              765
Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln
      770              775              780
Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln
  785              790

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&lt;210&gt; 2031

&lt;211&gt; 662

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2031

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atcatcgaaa gcagcgcccg ccagcaggat tcgatttctc gccaaactgac ccagcagttc
  60
atcagccaat ggcaggcggc tcacccggcg gatcagatca ccgtgcggtga cgtggcgctg
  120
aaccctgtgc cgcacctgga cagcatctg ctcgggcggt ggatgaaacc tgccgaacag
  180
cgcagcgaga tcgaacaggc ttccctggac cgctccaatc aattgaccga cgaattgctc
  240
gccgccgacg tgctggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc
  300
aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc
  360

```

cccagggat tgctgcacgg caagcgcgcg attgtgctga ccgctcgcg cggcattcat  
 420  
 accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg  
 480  
 attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcgggtga cttccaggaa  
 540  
 aaaggcctta accacgcca ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg  
 600  
 gttaatcgtc acataatcgc cgggtgttta tatcgcttca cgcaaaccct tcaagtacgc  
 660  
 gt  
 662

<210> 2032  
 <211> 195  
 <212> PRT  
 <213> Homo sapiens

<400> 2032  
 Ile Ile Glu Ser Ser Ala Arg Gln Gln Asp Ser Ile Ser Arg Gln Leu  
 1 5 10 15  
 Thr Gln Gln Phe Ile Ser Gln Trp Gln Ala Ala His Pro Ala Asp Gln  
 20 25 30  
 Ile Thr Val Arg Asp Val Ala Leu Asn Pro Val Pro His Leu Asp Thr  
 35 40 45  
 His Leu Leu Gly Gly Trp Met Lys Pro Ala Glu Gln Arg Ser Ala Ile  
 50 55 60  
 Glu Gln Ala Ser Leu Asp Arg Ser Asn Gln Leu Thr Asp Glu Leu Leu  
 65 70 75 80  
 Ala Ala Asp Val Leu Val Met Ala Ala Pro Met Tyr Asn Phe Ala Ile  
 85 90 95  
 Pro Ser Thr Leu Lys Ala Trp Leu Asp His Val Leu Arg Ala Gly Val  
 100 105 110  
 Thr Phe Lys Tyr Thr Ala Thr Gly Pro Gln Gly Leu Leu His Gly Lys  
 115 120 125  
 Arg Ala Ile Val Leu Thr Ala Arg Gly Gly Ile His Thr Gly Ala Ser  
 130 135 140  
 Ser Asp His Gln Glu Pro Tyr Leu Arg Gln Val Met Ala Phe Ile Gly  
 145 150 155 160  
 Ile His Asp Val Thr Phe Ile His Ala Glu Gly Val Asn Leu Ser Gly  
 165 170 175  
 Asp Phe Gln Glu Lys Gly Leu Asn His Ala Lys Ala Leu Leu Ala Gln  
 180 185 190  
 Leu Val Ala  
 195

<210> 2033  
 <211> 380  
 <212> DNA  
 <213> Homo sapiens

<400> 2033  
 aaattttaaa acggtcatca tttaacaggc gaagctgtaa aacgcagtct tgaagagggga  
 60

atgaaaaaaaa gtgatttggt aaaaggatca cttcctatca aatcaatcaa cgctcatgga  
 120  
 caaaaagtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc  
 180  
 ccatttgctg ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt  
 240  
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc  
 300  
 aaagactact ggcaaggtag gccaaaatta aaaagaatta atgtcactta tcatgaagat  
 360  
 ggtaatantc gtgttgatca  
 380

<210> 2034  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2034  
 Met Lys Lys Ser Asp Leu Leu Lys Gly Ser Leu Pro Ile Lys Ser Ile  
 1 5 10 15  
 Asn Ala His Gly Gln Lys Val Thr Ile Asn Thr Lys Glu Pro Tyr Pro  
 20 25 30  
 Glu Leu Lys Ser Glu Leu Ala Ser Pro Phe Ala Ala Ile Tyr Asp Thr  
 35 40 45  
 Lys Ala Lys Asn Lys Val Thr Asp Gln Pro Val Gly Thr Gly Pro Tyr  
 50 55 60  
 Gln Ile Asp Ser Tyr Lys Arg Ser Gln Lys Ile Val Leu Lys Gln Phe  
 65 70 75 80  
 Lys Asp Tyr Trp Gln Gly Thr Pro Lys Leu Lys Arg Ile Asn Val Thr  
 85 90 95  
 Tyr His Glu Asp Gly Asn Xaa Arg Val Asp  
 100 105

<210> 2035  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2035  
 ngaattcctt tactgcttgc aacacaggcc caagctactc gcagccatga tacttctctg  
 60  
 cttcacttct ttcattgtatg tatgtatgta tgtatgtatg tatgtatgta tgtatgtatg  
 120  
 tatgctntaa tgttccccctt tcatctcgca tgtctccact tctgctgcta ttgctgttac  
 180  
 ttgtgtgttg gtgcacctaa tgggtgtcca tttttctctg atgctgtggt catttttctt  
 240  
 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagtcc  
 300  
 actgggtgctt ttgctgcca gctctaattt actgttatcc cctttagtga aattttttct  
 360  
 ttttttctct tctattcca gttattatac agaactatcc aacttcaaga tttgtggggt  
 420

tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca  
 480  
 acttggggga acctt  
 495

<210> 2036  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2036  
 Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His  
 1 5 10 15  
 Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met  
 20 25 30  
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His  
 35 40 45  
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly  
 50 55 60  
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu  
 65 70 75 80  
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser  
 85 90 95  
 Leu Tyr

<210> 2037  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2037  
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagacg  
 60  
 ggaagagtga gggtggagt cctttccgc gctcatcttc cgtccccact ccacgcccag  
 120  
 caaatccaaa caccgcggcc tctggtggcc cgggcttcca tttcccctgg aggggcaagg  
 180  
 gcgtttcctc ttccgcccac ccggggcgct gagcggcggg aacagcggcg ggggctttgt  
 240  
 ggtcccgggg ggtccgagt tgtgtcagg gctggggcgg gggatgggcg cggcccttg  
 300  
 gtatccctca cggtcctggt tcatgag  
 327

<210> 2038  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2038  
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys  
 1 5 10 15  
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

20 25 30  
 Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala  
 35 40 45  
 Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln  
 50 55 60  
 Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala  
 65 70 75 80  
 Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val  
 85 90 95  
 His Glu

<210> 2039

<211> 307

<212> DNA

<213> Homo sapiens

<400> 2039

accggtgata cactctgcga aagcggccgc gagcgaagcg ttcttggtct tcttcgagat  
 60  
 cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctgggccaac  
 120  
 accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcaagaa aggacgcatt  
 180  
 cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc  
 240  
 aatcgagtcc ttcgaaatcc ccccttggca tacatgtcgg ccacgtcgt cagccagagt  
 300  
 aacgcgt  
 307

<210> 2040

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2040

Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro  
 1 5 10 15  
 Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser  
 20 25 30  
 Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro  
 35 40 45  
 Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala  
 50 55 60  
 Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro  
 65 70 75 80  
 Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro  
 85 90

<210> 2041

<211> 348

<212> DNA

<213> Homo sapiens



&lt;400&gt; 2041

nnccggcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc  
 60  
 gccagcttcc tgccgttcgc cagacgcata gccgaggcgg ggggtgcgcaa ttcgctcgcc  
 120  
 cagctggtcg ccaagctgac cctgcccggc atgcccgcaca tctaccaggg ctgcgagatg  
 180  
 tgggacctca gcctggtcga ccggggacaat cgccgccccg tcgactacga gacacgcgac  
 240  
 gcggccctgg ccggtctgggt cgcgaccccc ccggaggaac gcgccgcggc gctgcgccacc  
 300  
 ctgctgacgg attggcgcag cggcgcggtc aagctggccg tgacgcgt  
 348

&lt;210&gt; 2042

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2042

Xaa	Arg	Arg	Cys	Arg	Asp	Ser	Pro	Ala	Met	Arg	Ser	Asn	Pro	Ala	Arg
1				5				10					15		
Gly	Ala	Phe	Leu	Ala	Ser	Phe	Leu	Pro	Phe	Ala	Arg	Arg	Ile	Ala	Glu
			20					25					30		
Ala	Gly	Val	Arg	Asn	Ser	Leu	Ala	Gln	Leu	Val	Ala	Lys	Leu	Thr	Leu
		35					40					45			
Pro	Gly	Met	Pro	Asp	Ile	Tyr	Gln	Gly	Cys	Glu	Met	Trp	Asp	Leu	Ser
	50					55					60				
Leu	Val	Asp	Arg	Asp	Asn	Arg	Arg	Pro	Val	Asp	Tyr	Glu	Thr	Arg	Asp
65					70					75				80	
Ala	Ala	Leu	Ala	Gly	Trp	Val	Ala	Thr	Pro	Pro	Glu	Glu	Arg	Ala	Ala
				85					90					95	
Ala	Leu	Arg	Thr	Leu	Leu	Thr	Asp	Trp	Arg	Ser	Gly	Ala	Val	Lys	Leu
			100					105					110		
Ala	Val	Thr	Arg												
			115												

&lt;210&gt; 2043

&lt;211&gt; 712

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2043

gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgtc  
 60  
 gaagattcgg tgccgagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag  
 120  
 gaacgtgccg ataccgggga tggacccccg cggatggatca ttgatccgat cgacggcact  
 180  
 gcgaattttc tgcgtaggggt cccagtgtgg gccaccctca ttgccctcag cgctcaggag  
 240  
 cagattgtcg catctgtggt ctctgtcct gccctcaagc gacgctgggt ggcagcccgt  
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat  
 360  
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc  
 420  
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggacccg agccttcggc  
 480  
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa  
 540  
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagttc  
 600  
 accggtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatggtttc  
 660  
 cttcatgacc aggccttagc catggtccag cctcaggagt gagcaccgat cg  
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala	1	5	10	15
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg	20	25	30	
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly	35	40	45	
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu	50	55	60	
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp	65	70	75	80
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp	85	90	95	
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser	100	105	110	
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe	115	120	125	
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His	130	135	140	
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly	145	150	155	160
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala	165	170	175	.
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile	180	185	190	
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly	195	200	205	
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln	210	215	220	
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu								225	230		

<210> 2045

<211> 406

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2045

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nnttggacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg
60
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttgga agaaaccggt caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc
240
gagatcgtcg cgatgactgg cgacgggtgc aacgacgccc cctcgtcaa ggccggcccat
300
atcgggtgctg ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcgggtcc ggctcgc
406

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&lt;210&gt; 2046

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
1           5           10           15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
20           25           30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
35           40           45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
50           55           60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
65           70           75           80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
85           90           95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
100          105          110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
115          120          125
Ile Val Gln Ser Val Arg Leu
130          135

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&lt;210&gt; 2047

&lt;211&gt; 796

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2047

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aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
60
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

```

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt  
 180  
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca  
 240  
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtgta  
 300  
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg  
 360  
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat  
 420  
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtgc  
 480  
 tggcttttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac  
 540  
 agctggctcg gtggactgga ctgaccagct ggggtctcagg aacttggaag tgtccagctg  
 600  
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc  
 660  
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctctga  
 720  
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag  
 780  
 caaagatttg gctgag  
 796

&lt;210&gt; 2048

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35					40					45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50					55					60				
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65					70					75				80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
			85						90					95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100					105					110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115					120					125			
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130					135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150				155						160

&lt;210&gt; 2049

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgtcg  
 60  
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg  
 120  
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cgcccttca  
 180  
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgccattgt  
 240  
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc  
 300  
 gtcggccgat ggcgcacgct gaccactac ctgctgccgg cgctctctgc tccctgctg  
 360  
 cgccacgcca tgttgctct gccgggcatt gcgctggcgc tggcggcctt gggttttttt  
 420  
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct  
 480  
 tatctcgaac gggcgccctg gggagtcctg gcaccg  
 516

&lt;210&gt; 2050

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40						45		
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
				85					90					95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115				120						125			
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro	
	130				135						140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165					170						

&lt;210&gt; 2051

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat  
 60  
 aatagtgatc gtctcggtaa gaatttatgg accgacgggtg aaatggggga gccagtaggt  
 120  
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat  
 180  
 tgggtagatg atgggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa  
 240  
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg  
 300  
 atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat  
 360  
 aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t  
 411

&lt;210&gt; 2052

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5				10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20						25					30		
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50					55				60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70						75				80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90						95	
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100					105						110		
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
		115				120						125			
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130						135								

&lt;210&gt; 2053

&lt;211&gt; 287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc  
 60  
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac  
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc  
 180  
 acacctgagg gtgccgaggg cccgactccg caaaccacgc accagctgaa ggcctgtgc  
 240  
 tccctggctg cagagggtat gtggacagac acatttgagt tttgtga  
 287

<210> 2054  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 2054  
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys  
 1 5 10 15  
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr  
 20 25 30  
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly  
 35 40 45  
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys  
 50 55 60  
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys  
 65 70 75

<210> 2055  
 <211> 298  
 <212> DNA  
 <213> Homo sapiens

<400> 2055  
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt ggggtactgat  
 60  
 tcccacacca ccatggaaaa tggctcttggc attctgggct ggggcgtcgg tggatttgaa  
 120  
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggcttt  
 180  
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact  
 240  
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg  
 298

<210> 2056  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2056  
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys  
 1 5 10 15  
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu  
 20 25 30  
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln  
 35 40 45  
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50                      55                      60  
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr  
 65                      70                      75                      80  
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr  
                     85                      90                      95  
 Gly Gly Ser

<210> 2057

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2057

acgcgtccccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta  
 60  
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa  
 120  
 caaaatctag ttggacaaa caacgcccag tatggtcggt atctagcctt tggatgatc  
 180  
 ttcattggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt  
 240  
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaa  
 300  
 agagaaacct tctcaagtta ccctgatgat gttactgtta ctcacttgac caaaaaggg  
 360  
 gacaaaaaac ttgattttac agtttggaa agcttaacag aagatttact tgctaacgga  
 420  
 gactactcag cggaatatc taactacaag agtggccatg ttacgacaga cccaaatggt  
 480  
 atcctactaa aaggtacagt caaagataat ggctccagt tcgcataccta tctaggaatt  
 540  
 aaaacggacg gaaaagttac tgttcatga  
 569

<210> 2058

<211> 128

<212> PRT

<213> Homo sapiens

<400> 2058

Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr  
 1                      5                      10                      15  
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr  
                     20                      25                      30  
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp  
                     35                      40                      45  
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp  
                     50                      55                      60  
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp  
 65                      70                      75                      80  
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp  
                     85                      90                      95  
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln



100 105 110  
 Phe Ala Ser Tyr Leu Gly Ile Lys Thr Asp Gly Lys Val Thr Val His  
 115 120 125

<210> 2059  
 <211> 644  
 <212> DNA  
 <213> Homo sapiens

<400> 2059  
 gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc  
 60  
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcatgac  
 120  
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc  
 180  
 gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcca  
 240  
 gctcgacaag aagaaccgca gaggggagac ggccctgggtca gggagcgcac cttcagcgtt  
 300  
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag  
 360  
 tcggccgagg tccgccggtta cctctctcat ggcttccaca ggaacgcggt cacacaccac  
 420  
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc  
 480  
 gtagcgggct gctgaggtga caaagatcca cagatccgcg gcctggagca actgagccgc  
 540  
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc  
 600  
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt  
 644

<210> 2060  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2060  
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly  
 1 5 10 15  
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala  
 20 25 30  
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu  
 35 40 45  
 Ser Ser Leu Ala Gln Asn Gln Gln Lys Arg Arg Glu Val Ile Ala Ser  
 50 55 60  
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val  
 65 70 75 80  
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu  
 85 90 95  
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln  
 100 105 110  
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115 120 125  
 Glu Phe  
 130

<210> 2061  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 2061  
 gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgcatgggt gtggccccag  
 60  
 atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag  
 120  
 acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctgggggctc  
 180  
 acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc  
 240  
 tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt  
 300  
 tgccacacgc accaggtcct gactgggagt ccggcccccga gggcctgtgg atggctggcc  
 360  
 tgggcccagc ctccgcccc aagggtgctg gcacctggca tgtgcccagc agttggggcc  
 420  
 ggctgggtggg aagggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg  
 480  
 t  
 481

<210> 2062  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2062  
 Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser  
 1 5 10 15  
 His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val  
 20 25 30  
 Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro  
 35 40 45  
 Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg  
 50 55 60  
 Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu  
 65 70 75 80  
 His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe  
 85 90 95  
 Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His  
 100 105 110  
 Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala  
 115 120 125  
 Leu Leu Thr Arg Leu  
 130

<210> 2063  
<211> 419  
<212> DNA  
<213> Homo sapiens

<400> 2063  
gccggcgccg tcgagcgcggt gcctttcaat atcgaggccc aagacatggt gctgctcatc  
60  
gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc  
120  
atcgagcgccg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac  
180  
tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgcccgcgt gcaccacgtg  
240  
gtggaagaaa ccaaccggac cctagatgcc gctaccgcgc tggcatcttc cgatctagat  
300  
acattccggc ggcttatgcy cgagagccac atctccctgc gcgaccttta tgaggtcacc  
360  
actccggagc tcgactccgt tttaccgcy gccggcgagc tgggcgctcg catgannnn  
419

<210> 2064  
<211> 139  
<212> PRT  
<213> Homo sapiens

<400> 2064  
Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met  
1 5 10 15  
Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly  
20 25 30  
Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala  
35 40 45  
Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr  
50 55 60  
Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val  
65 70 75 80  
Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser  
85 90 95  
Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser  
100 105 110  
Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe  
115 120 125  
Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa  
130 135

<210> 2065  
<211> 598  
<212> DNA  
<213> Homo sapiens

<400> 2065  
gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccgg cgcaaagggtg  
60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc  
120  
attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg  
180  
cttctcgaac tcggtggtga ggatgccaaag atcacctacc ttaagccggt ccccgaacag  
240  
cgcataaatg gttcgtgtgc tggatggcacc ggtgccttca tcgaccagat ggctaccctg  
300  
ctgcacaccg acactcccgg cctcaatgac ctgcacatccc gagccaagac catccatccg  
360  
atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg  
420  
gcccgccacg aggatctggc tgcctcgggc ctgcaggctg tcgccactca gtgcattgcc  
480  
ggcctggcat gtggtcgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcac  
540  
tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaagg tgacgcgt  
598

<210> 2066  
<211> 199  
<212> PRT  
<213> Homo sapiens

<400> 2066  
Ala Gly Ala Met Ala Ser Leu Leu Ala Asp Ala Ala Asp Ala Leu Pro  
1 5 10 15  
Gly Ala Lys Val Arg Ala Thr Val Thr Gly Ser Ala Gly Leu Gly Thr  
20 25 30  
Ala Glu Ala Leu Gly Leu Thr Phe Ile Gln Glu Val Ile Ala Glu Thr  
35 40 45  
Ala Ala Val Gln Arg Trp Asn Pro Asp Ala Asp Val Leu Leu Glu Leu  
50 55 60  
Gly Gly Glu Asp Ala Lys Ile Thr Tyr Leu Lys Pro Val Pro Glu Gln  
65 70 75 80  
Arg Met Asn Gly Ser Cys Ala Gly Gly Thr Gly Ala Phe Ile Asp Gln  
85 90 95  
Met Ala Thr Leu Leu His Thr Asp Thr Pro Gly Leu Asn Asp Leu Ala  
100 105 110  
Ser Arg Ala Lys Thr Ile His Pro Ile Ala Ser Arg Cys Gly Val Phe  
115 120 125  
Ala Lys Ser Asp Leu Gln Pro Leu Ile Asn Glu Gly Ala Arg His Glu  
130 135 140  
Asp Leu Ala Ala Ser Val Leu Gln Ala Val Ala Thr Gln Cys Ile Ala  
145 150 155 160  
Gly Leu Ala Cys Gly Arg Pro Ile Arg Gly Lys Val Ile Phe Leu Gly  
165 170 175  
Gly Pro Leu His Phe Met Pro Ser Leu Arg Asp Ala Phe Ser Arg Val  
180 185 190  
Leu Asp Gly Lys Val Asp Ala  
195

<210> 2067  
<211> 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2067

ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac  
 60  
 aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg  
 120  
 tacttcggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg  
 180  
 ccgatcggct acatggccag tttcaagaac ctgtgacgac gcacgccgga gctggacttc  
 240  
 gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc  
 300  
 gtcaacttcc acgcctctgt ctggccggcg atgctcgaag gctcggggcta ccgtaaaccg  
 360  
 accggt  
 366

&lt;210&gt; 2068

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1				5					10					15	
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20					25					30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
			35				40					45			
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50					55				60					
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65					70				75					80	
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
				85				90					95		
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
			100					105					110		
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
			115					120							

&lt;210&gt; 2069

&lt;211&gt; 280

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2069

cctagagagg atggtggaga ctgtgcgtgt gcagggtggt ccggaacctt ccctgggatg  
 60  
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt  
 120  
 gcctttggct ggaattccac cccagccttc ttgcctcaag aacgcccttc ccccttcaga  
 180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa  
 240  
 agaccctctc ctcgatcaag ctttggtcaa gctcctaccc  
 280

<210> 2070  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

<400> 2070  
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly  
 1 5 10 15  
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro  
 20 25 30  
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys  
 35 40 45  
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val  
 50 55 60  
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu  
 65 70 75 80  
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro  
 85 90

<210> 2071  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2071  
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgct atacagcacg ttaacatagc  
 60  
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat  
 120  
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac  
 180  
 agacatgact ttcttttatct ggggaaaagg agggcattaa accagattag gggctgggag  
 240  
 gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag  
 300  
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac  
 360  
 aatatgttca tacataaaga ctctaccctc aggtgatca  
 399

<210> 2072  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2072  
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu  
 1 5 10 15  
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp

```

                20                25                30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
      35                40                45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
      50                55                60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
65                70                75                80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
      85                90                95
Ser Thr Leu Arg
      100

```

<210> 2073  
 <211> 339  
 <212> DNA  
 <213> Homo sapiens

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<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggetgcct gcgttccttg gctcgtggcc
60
ccttcctcca ccttcaagcc agcagcggag gcctgagtc tctcatgcc atctctctgt
120
tctctctcct gcctcctcct ccacactgaa ggacccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggteg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttggtggcg ggggcataat tctgtcgac
339

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<210> 2074  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
  1                5                10                15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
      20                25                30
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
      35                40                45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
      50                55                60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
65                70                75                80
Gly Thr Glu Val Asp
      85

```

<210> 2075  
 <211> 481  
 <212> DNA  
 <213> Homo sapiens

<400> 2075  
ntggccaggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa  
60  
accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt  
120  
atcctgagcg ctccctgccca actgggcctg ctgaggaaga tccgcctctg gcacgacagc  
180  
cgtgggcctt ccccaggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga  
240  
cagggtggt tcttccctgc ccagtgtctg ctgtctgccg gcaggcatga tggtcgctg  
300  
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360  
ttcacagagt acctggagga tttccatgtc tggtgtctcg tgtacagcag gccctcctcc  
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480  
t  
481

<210> 2076  
<211> 160  
<212> PRT  
<213> Homo sapiens

<400> 2076  
Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn  
1 5 10 15  
Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe  
20 25 30  
Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu  
35 40 45  
Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser  
50 55 60  
Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly  
65 70 75 80  
Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His  
85 90 95  
Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly  
100 105 110  
Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe  
115 120 125  
His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu  
130 135 140  
His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala  
145 150 155 160

<210> 2077  
<211> 1410  
<212> DNA  
<213> Homo sapiens

<400> 2077



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120  
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct  
180  
ctttggtcta cagtgagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg  
240  
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag  
300  
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct  
360  
ctgggtcccc gagcacagtg ccagggaaga caccccaat ccccatctga acaggccgag  
420  
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct  
480  
cctccctcgc aagagcaggc ttgtgcacag cccggcacag ggccagccag ggcggcccct  
540  
gcggctgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtgga  
600  
tctgtggtc cagcacagcc actcgagct tgagggccgc cagggtctgc agctcctggg  
660  
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga  
720  
cggcgaggct cgggggggccc tnnccccaca gacatggtct tggtaggtgt tccgccaccg  
780  
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840  
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900  
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960  
ccacagcact gagcctgggc tggggcccgc ctgaagctgt ctgcatgttc tggaggaact  
1020  
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1140  
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgct  
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ggtccctgag gcccgcacca ggctggggg ttcgggctcc catcccaaca cgggtcccat  
1260  
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga  
1320  
ggcccttggg ggggtctctg tctgaagcat ggccaccagc ttggcctggg gaatgcgggtg  
1380  
gggaggaggc tgtcgtgcc gaagaggtga  
1410

&lt;210&gt; 2078

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser  
 1 5 10 15  
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser  
 20 25 30  
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser  
 35 40 45  
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys  
 50 55 60  
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln  
 65 70 75 80  
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly  
 85 90 95  
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala  
 100 105

&lt;210&gt; 2079

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag  
 60  
 gtactggcgg tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt  
 120  
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc  
 180  
 cggcgtgtgc ttgaccgctt ggtgggggtac ctggtgaccc aagagttgcg gcgcctgatg  
 240  
 ggcaaaccta cttccgctgg ccgcgttcaa tcacccgccg tgtttcttgt ggtcttgccg  
 300  
 gaacgcgaga tccgcaactt tcagggtgatc aatcactttg gcgtgcgtct gttctttgcc  
 360  
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga ttctgcaagc  
 420  
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat  
 480  
 gtggtcgtgg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc  
 540  
 tcatccactc ttcaacaggc cgcca  
 565

&lt;210&gt; 2080

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp  
 1 5 10 15  
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe  
 20 25 30  
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

          35          40          45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
   50          55          60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
65          70          75          80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
          85          90          95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
          100          105          110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
          115          120          125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
          130          135          140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
145          150          155          160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
          165          170          175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
          180          185

```

<210> 2081  
 <211> 319  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2081
aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
60
aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgctacaca acttgctcag aggetcaatt tgccaatgt tttgcagacg
180
gacatggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
240
tggtctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagcga agggtttgg
319

```

<210> 2082  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2082
Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1          5          10          15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
          20          25          30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
          35          40          45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
          50          55          60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
```

&lt;400&gt; 2085

nnggatccca aagaccgcca tattgccatg gtgttccaaa actatgccct ctaccgcac  
 60  
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa  
 120  
 atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc  
 180  
 aaaccaagg cactctccgg tggccagcgg cagcgcgctc ccatggggcg cgctattgtt  
 240  
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt  
 300  
 gtccgcaccc gcgccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat  
 360  
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc  
 420  
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accaccccg c taacgcgt  
 478

&lt;210&gt; 2086

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala
1				5					10					15	
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys
			20					25					30		
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala
		35					40					45			
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala
	50					55					60				
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val
65				70						75				80	
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp
			85					90					95		
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg
		100						105					110		
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala
	115					120						125			
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln
	130					135					140				
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	
145					150					155					

&lt;210&gt; 2087

&lt;211&gt; 731

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2087

gataattctc tacacggcat gagctgggga cgtaccccc ttgccaacgt cacctcacgg  
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt  
 120  
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct  
 180  
 ggctcggatca atcgcagcaa tcacccccctc ccccgaggcag aagctaactc caataggcca  
 240  
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc  
 300  
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccgggtgc gttgggtaag  
 360  
 gctggattta gttccgccga cgcgggtggct ctagcgccgc gtattgccag agaaatggca  
 420  
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg  
 480  
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa  
 540  
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg  
 600  
 gtggtcgcaa atcttgtcgc cgcgggtctg acaagaagtt ggcaaaggct acggctgtcg  
 660  
 ccattgccgc aactgcgctc aatcccgcctc tcggggccgat cgcaaagact gaggccatta  
 720  
 aggctgagat c  
 731

&lt;210&gt; 2088

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5				10					15		
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
		20					25						30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
		35					40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
	50					55				60					
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65				70					75					80	
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
				85					90					95	
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
		100					105								

&lt;210&gt; 2089

&lt;211&gt; 315

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2089

accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag  
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgtca gcccatcatc  
120  
ttcgacaccg accacttcga ggggtacgag cgcccccgcc tcgtgctgca cgaagtcacc  
180  
gatcaacttg gccaaagcgtt ccttgatttg gaaggcccag agccggctct cggctgggaa  
240  
tcgttggtgg cgtctctcac gagtcttgtc gactctatgg ggatccgtct gaccggcatt  
300  
accgattcga tcccg  
315

&lt;210&gt; 2090

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1				5				10						15	
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25					30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
		35					40					45			
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50					55					60				
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65					70					75				80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
				85					90					95	
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
				100				105							

&lt;210&gt; 2091

&lt;211&gt; 322

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2091

actcttggtcc attgtctctg tctctgcgtt tttctctctg tctctctgtg tctctgtctc  
60  
tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng  
120  
agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gccattttg gtctctgctt  
180  
tctttcctct gtgtgtctct ccatttctgt ctctcttct ctgtctctct ccatttctgt  
240  
ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt  
300  
ccatttctgt cccttcacgc gt  
322

&lt;210&gt; 2092

&lt;211&gt; 107

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctacccgcg agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaata
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttgcacaacat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1             5             10             15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
      35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```



85                      90                      95  
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg  
                     100                      105

<210> 2095  
 <211> 402  
 <212> DNA  
 <213> Homo sapiens

<400> 2095  
 cccgtcacag accaggaaga agcagacaat atgatcgctt ctttcgacac ttatgttcgc  
 60  
 accctgcccc ccgccgccaa tcttctgctt aaacaattcc atattgtgga tgttgcccgg  
 120  
 cgcgtggtgg gcgtgggttc agtgggcacc cactcctgg tactgctact gtccggcccc  
 180  
 aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat  
 240  
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gctcctcccc  
 300  
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag  
 360  
 attctgcagg cccactcgga tccgctgctg ggggtggacgc gt  
 402

<210> 2096  
 <211> 134  
 <212> PRT  
 <213> Homo sapiens

<400> 2096  
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp  
 1                      5                      10                      15  
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln  
                     20                      25                      30  
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val  
                     35                      40                      45  
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro  
                     50                      55                      60  
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His  
 65                      70                      75                      80  
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser  
                     85                      90                      95  
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly  
                     100                      105                      110  
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro  
                     115                      120                      125  
 Leu Leu Gly Trp Thr Arg  
 130

<210> 2097  
 <211> 641  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2097

ncgttttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc cctcccagag  
 60  
 gcggagcagg cgtggccgca gagcagcggg gaggaggagc tgcagctcca gctggccctg  
 120  
 gccatgagca aggaggagge cgaccaggta ctgggcgtgc agctggggct gtctgtccgc  
 180  
 caccgcctc cacgcctcac ttcaggctcc ctcccagcca ggcgtgggccc tggccctcac  
 240  
 tgtcgtgct ccacatgctg tcaactgtct cctccccagt cctgcctcat cctcacnccg  
 300  
 ccgtccctct gcgtgtcact ctctgctgt cctcactggt tcagggaccc ccagcctctc  
 360  
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc cctcccgtc  
 420  
 atgccccca cactctctct ccccagccc ccgtcctgcg gccccgagga cgacgcccag  
 480  
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg  
 540  
 tccctgcccc tgccaggggc tcccctcaga ccagccccgt cgcctcttcc taagtcaccc  
 600  
 cccaccatcc tgctgggccc gaagcccaca ggctcacgcg t  
 641

&lt;210&gt; 2098

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2098

Xaa	Phe	Leu	Thr	Arg	Pro	Pro	Ala	Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly
1				5					10					15	
Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35					40					45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
	50					55					60				
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65					70					75				80	
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
				85					90					95	
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
			100					105					110		
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
		115					120					125			
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
		130				135					140				
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145					150					155					160
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
				165					170					175	
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

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 Pro Thr Gly Ser Arg  
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 <211> 347  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
 cagtattctg ttcaggtgag ctgagaggtg gcaggtgcct ggctgcgggc ctgcctcact  
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 347

<210> 2100  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2100  
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 35 40 45  
 Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp  
 50 55 60  
 Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu  
 65 70 75 80  
 Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala  
 85 90 95  
 Ser Ser Pro Leu Ala His Pro Thr Trp Pro  
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<210> 2101  
 <211> 549  
 <212> DNA  
 <213> Homo sapiens

<400> 2101  
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 120  
 ggttgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat  
 180  
 taacagtgtg gttggagacc ggaacggtgc gggatcagta tgtggcccgc tgtgacacca  
 240  
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 300  
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 360  
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 420  
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<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

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Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
		35					40					45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50					55					60				
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65					70					75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90					95		
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
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Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

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 120  
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 180

ggtatcgtcg gatgcggagc ggtcgggtgc cgggttgccg ctgtgatggc ggccatgggt  
 240  
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 360  
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 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

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His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55				60					
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70				75					80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
			85					90					95		
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130					135					140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
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<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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 240  
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 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt  
360  
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 3900  
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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

Ser	Asn	Gln	Ser	Val	Phe	Leu	Leu	Phe	Ser	Asp	Leu	Leu	Pro	Gln	Leu
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Glu	Ala	Pro	Ser	Ser	Leu	Thr	Pro	Ser	Ser	Glu	Leu	Ser	Ser	Pro	Gly
			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
			35				40					45			
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
	50					55					60				
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65					70					75				80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
				85					90					95	
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
		115					120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
	130					135					140				
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145				150						155				160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
				165					170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
	195					200					205				
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
	210					215					220				
Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val



225

230

235

240

<210> 2107  
 <211> 305  
 <212> DNA  
 <213> Homo sapiens

<400> 2107  
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 120  
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 180  
 gcctccctcc aaatcaccag ttcttgttct ggtgaacccc tggacctgga ttccaaggat  
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 300  
 ccncn  
 305

<210> 2108  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 2108  
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 Ser Gly Leu Val Ser Glu Asn Thr Pro Arg Pro Asp Asp Ser Arg Ala  
 35 40 45  
 Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro  
 50 55 60  
 Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg  
 65 70 75 80  
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 85 90

<210> 2109  
 <211> 700  
 <212> DNA  
 <213> Homo sapiens

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 360  
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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
			20					25					30		
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35					40					45			
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
		50				55					60				
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
65					70					75				80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
				85					90					95	
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100					105					110		
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115					120					125			
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
		130				135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145				150						155				160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
			165					170						175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
		180					185						190		
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
		195					200						205		
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
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225				230											

<210> 2111  
<211> 339  
<212> DNA  
<213> Homo sapiens

<400> 2111  
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339

<210> 2112  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2112  
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Gly Arg Gly Asn Lys Leu Ala Ile Ala Glu Leu Val Ala Leu Ala Glu  
35 40 45  
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Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala  
65 70 75 80  
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180

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240  
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360  
g a a c t g t g c a t c a a g a g a g c t a t c a t g g a g c t g g a a a g g a g t a c a g g g t a c c a t t t g g a t  
420  
a g c a a a a c c c c a g g g c c g a g g t t t g a t a t c a a t g a t a c t a t c a g g g c a g t g g t g t t a g a g  
480  
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540  
g t g g a c t c g t g g a t a t c c a g t g a g c t g a g c t g a g t c g g c c c c t g a a g g c c t c a g c a a t g g t t g g  
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660  
g c c a t g g g g c t g t c a g t t g c t g t t g c a t t t a g c g t g a t g c t g c t g a c a a c t t g g a a c a t c  
720  
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840  
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1320  
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1620  
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<212> PRT

<213> Homo sapiens

<400> 2114

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Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
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Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
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Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
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 Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly  
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 Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp  
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 His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys  
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 His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu  
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 Cys His Gln Cys Ser Pro Thr Thr Ser Ser Phe Val Gln Ile Gln Asn  
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 His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val  
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 Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His  
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 Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val  
 595 600 605  
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 Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys  
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1585

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 35 40 45  
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 50 55 60  
 Phe Trp Asn Phe Val Glu Ala Ser Gln Asn Ile Gly Ser Ser Asp His  
 65 70 75 80  
 Asp Gly Thr Asp Tyr Ser Tyr Tyr His Ala Ile Leu Glu Ala Ala Phe  
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 <211> 336  
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 180  
 tactattcaa ctgactatga gtttctgggc tcttttcaca atggagtgtc cgagggagat  
 240  
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336

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<211> 112  
<212> PRT  
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35 40 45  
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50 55 60  
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp  
65 70 75 80  
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile  
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<211> 426  
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240  
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<210> 2124  
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Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
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Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
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120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaaag agaggagcca aggtgagaat tcttaggaag
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285

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<210> 2126  
 <211> 95  
 <212> PRT  
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Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127  
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 <212> DNA  
 <213> Homo sapiens

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 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln  
 35 40 45  
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu  
 50 55 60  
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met  
 65 70 75 80  
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro  
 85 90 95  
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His  
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 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met  
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180  
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240  
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354

&lt;210&gt; 2130

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2130

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		20						25					30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
		35					40					45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
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Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65				70					75					80	
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85					90					95		
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
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Leu	Asp	Ile	Phe	Ala	Ala										
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&lt;210&gt; 2131

&lt;211&gt; 324

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2131

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180  
caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac  
240  
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300

cctgctcaag aagaagttac gcgt  
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Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly  
20 25 30  
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala  
35 40 45  
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp  
50 55 60  
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp  
65 70 75 80  
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile  
85 90 95  
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg  
100 105

<210> 2133  
<211> 292  
<212> DNA  
<213> Homo sapiens

<400> 2133  
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60  
gtggctgtct ttagaggacc cggcgaactt ttctgtcttt ttcccacttg ctccatcaca  
120  
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac  
180  
accagattac atcgtgtggt atccaacct gcatttttctt gccctctcctt tactgcgagt  
240  
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt  
292

<210> 2134  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2134  
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu  
1 5 10 15  
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr  
20 25 30  
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His  
35 40 45  
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50	55	60
Asn Pro Ala Phe Ser Cys	Pro Ser Phe Thr	Ala Ser Val Thr Ser Thr
65	70	75
Arg Lys Gly Leu Gln	Pro Pro Ser Phe	Pro Val Ile Tyr
85	90	

<210> 2135  
 <211> 439  
 <212> DNA  
 <213> Homo sapiens

<400> 2135  
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 actccgagcg tcgaccaaact cgagatgcat ccttcgttca accagggcgac cttccgcgca  
 120  
 gagctggccg agcgcggcat taaccggag gcctggagcc cgctggggcca gtcgaaggac  
 180  
 ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg  
 240  
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca  
 300  
 cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca  
 360  
 attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgactttctga  
 420  
 ttctgcaaca ataaccggt  
 439

<210> 2136  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2136  
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala  
 1 5 10 15  
 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser  
 20 25 30  
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn  
 35 40 45  
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro  
 50 55 60  
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val  
 65 70 75 80  
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser  
 85 90 95  
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu  
 100 105 110  
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn  
 115 120 125  
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe  
 130 135

<210> 2137  
<211> 330  
<212> DNA  
<213> Homo sapiens

<400> 2137  
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tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg  
120  
aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc  
180  
tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggcctcgtac  
240  
ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag  
300  
atggggctga ggtcactgtg cgcccaagcc  
330

<210> 2138  
<211> 86  
<212> PRT  
<213> Homo sapiens

<400> 2138  
Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu  
1 5 10 15  
Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala  
20 25 30  
His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr  
35 40 45  
Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln  
50 55 60  
Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg  
65 70 75 80  
Ser Leu Cys Ala Gln Ala  
85

<210> 2139  
<211> 433  
<212> DNA  
<213> Homo sapiens

<400> 2139  
gagcagttga gcgcccagaa caccgggatc aacagcaacc tgtcggacat ggccggccag  
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gtgaacaagc tggcgagtac catcgcccag tacaacgata agatttccaa agtcaccacc  
120  
gccgccggtg ccccgaaacga cctgctggac cagcgcagcg aggcggtgcg ccagttgtcc  
180  
gagctggctg ggaccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc  
240  
ggtcagcgcc tggatgatgg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac  
300



gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc  
 360  
 acggtgaccg gtggcgagat cggtggtctg ctgcgctatc gcagcgatgt gctcgaccg  
 420  
 tcgatcaacg cgt  
 433

<210> 2140  
 <211> 144  
 <212> PRT  
 <213> Homo sapiens

<400> 2140  
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp  
 1 5 10 15  
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn  
 20 25 30  
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu  
 35 40 45  
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly  
 50 55 60  
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser  
 65 70 75 80  
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val  
 85 90 95  
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly  
 100 105 110  
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly  
 115 120 125  
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala  
 130 135 140

<210> 2141  
 <211> 426  
 <212> DNA  
 <213> Homo sapiens

<400> 2141  
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 gtttatcctt atctttcttt ccgcttgatc aatgatattg tggataaagg cgaagtgtta  
 120  
 ggtgacccaa ttgcttgtca tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa  
 180  
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa  
 240  
 gcggttggtc tggatactaa agtggtcgac ctttgtttca aaggcgttgc aagtcgtatc  
 300  
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg  
 360  
 aagttacgta aacctattca acagggcggt tatcttaaat acgtacatga ctctgagtat  
 420  
 cacgcg  
 426

<210> 2142  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2142  
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe  
 1 5 10 15  
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp  
 20 25 30  
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val  
 35 40 45  
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys  
 50 55 60  
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu  
 65 70 75 80  
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val  
 85 90 95  
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln  
 100 105 110  
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln  
 115 120 125  
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala  
 130 135 140

<210> 2143  
 <211> 1008  
 <212> DNA  
 <213> Homo sapiens

<400> 2143  
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 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg  
 120  
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgtcga taacctcggg  
 180  
 acggtcctca gccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg  
 240  
 acgtcaaga gcacatatga gtacctccgg ctcatcgacg gtcacgatct acccgacgac  
 300  
 gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatggtgga  
 360  
 gacagtcggc aggcccacgt cacccaactc atggcggcgt catccctgaa aaccctcaac  
 420  
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggtcgc  
 480  
 atcacgagaa agacggtgat gacggatctg cccatcgcca cgatgaggcg ggagatcggc  
 540  
 ctgtccaacg acgggttggt cctcacaccg tggaagggtca agacgacttc ttccgaggag  
 600  
 gctcgggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc  
 660

gagaaatggg ggtgggagtc gatctcggac gggatatttgc gccatctcga gacctacagt  
 720  
 ggccccagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct  
 780  
 cgttccccagt tgcaacgcat cggcgacagt ctgcgcatg cgccatatcc gaggaaggac  
 840  
 cttggtccgg cgctcattcg caatggaaag ccggtcaagg acaagtgcag tatcgaatcg  
 900  
 gcgtacctgt tgaggtattc cggaattgg gcgtggtgac atgacgggtt cttggcaagg  
 960  
 tgtgaccaag acattcccct cgggcgattc cgcgctggg ggggtgcac  
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
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His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
	50					55					60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75				80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90					95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115					120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130				135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155				160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165					170					175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195					200					205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
	210					215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230					235				240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
				245					250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
			260					265					270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275                      280                      285  
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn  
 290                      295                      300  
 Trp Ala Trp  
 305

<210> 2145  
 <211> 389  
 <212> DNA  
 <213> Homo sapiens

<400> 2145  
 tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gagtgcgac  
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 atgacaaccc ttgaacaatc attatctcaa attcccgcac ttctcgattat tcatgaacat  
 120  
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt  
 180  
 agcacagtca ttaaccttgc tttaactaat gcttcaaadc atcttgagaa tgaagaccgt  
 240  
 atttgttttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct  
 300  
 gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattgtt  
 360  
 tggatacatt gcgcacaaaa taaacgcgt  
 389

<210> 2146  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2146  
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile  
 1                      5                      10                      15  
 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu  
 20                      25                      30  
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu  
 35                      40                      45  
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp  
 50                      55                      60  
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser  
 65                      70                      75                      80  
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln  
 85                      90                      95  
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg  
 100                      105

<210> 2147  
 <211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 2147

ctccctgcgg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatgggtggg  
 60  
 atttgccctcg tcacctggaa tgacttccac tgtacctgcc ctgccaattt cacggggcct  
 120  
 acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg  
 180  
 gcggaggcca cgttccgcga ggggtcccccc gccgcgttca gcgggcacaa cgcgt  
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1				5					10					15	
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
		20						25					30		
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40					45			
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50					55					60				
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70					75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

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 gtcctgctga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg  
 120  
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgagggtg atgaaccacc  
 180  
 ctggcttggt gtgctgtgtc cagcaaacta caggggtgcc gctggtagtt atggtgaaac  
 240  
 cagacacttt tcttatccac gagattaaga ctcttcctgc taaagcgaag atccaagaca  
 300  
 tggttgctat taggcacacg gcttgcaatg agcagcagcg gacaacaatg attctgctgt  
 360  
 gtgaggatgg cagcctgcgc atttacctgg ccaacgtgga gaacacctcc tactggctgc  
 420  
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa  
 480  
 cagctacaat cacaaccng cacgtctagc caggtgactt tccccattga cttttttgaa  
 540  
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat  
 600  
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc  
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg  
 720  
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga  
 780  
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tcccccttcac cagagaagaa  
 840  
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcaggt  
 900  
 gtcacatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct  
 960  
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactctg  
 1020  
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtgggaact  
 1080  
 gtccctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc  
 1140  
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg  
 1200  
 tccttgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac  
 1260  
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc  
 1320  
 agtgctgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt  
 1380  
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 1440  
 attctcaagt gccactcaaa actgagggta agcc  
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1				5				10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
			20				25						30		
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35				40					45				
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
	50					55				60					
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70				75						80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85				90							95	
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100					105						110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
	115					120					125				
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
	130					135					140				
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

145		150		155		160									
Lys	Glu	Gln	Phe	Gly	Trp	Pro	Asp	Glu	Pro	Pro	Glu	Glu	Phe	Pro	Ser
				165					170					175	
Ala	Ser	Val	Ser	Asn	Ile	Cys	Pro	Ser	Asn	Leu	Asn	Gln	Ser	Asn	Gly
			180					185					190		
Thr	Gly	Asp	Ser	Asp	Ser	Ala	Ala	Pro	Thr	Thr	Thr	Ser	Gly	Thr	Val
		195						200				205			
Leu	Glu	Arg	Leu	Val	Val	Ser	Ser	Leu	Glu	Ala	Leu	Glu	Ser	Cys	Phe
	210					215					220				
Ala	Val	Gly	Pro	Ile	Ile	Glu	Lys	Glu	Arg	Asn	Lys	Asn	Ala	Ala	Gln
225					230					235					240
Glu	Leu	Ala	Thr	Leu	Leu	Leu	Ser	Leu	Pro	Ala	Pro	Ala	Ser	Val	Gln
			245						250					255	
Gln	Gln	Ser	Lys	Ser	Leu	Leu	Ala	Ser	Leu	His	Thr	Ser	Arg	Ser	Ala
		260						265					270		
Tyr	His	Ser	His	Lys	Val	Thr	Val	Leu	Ser	Gly	Lys	Gly	Asn	Cys	Ser
	275					280						285			
Ala	Asp	Arg	Glu	Ser	Asn	Lys	Leu	Ala	Leu	His	Cys	Lys	Ala	Thr	Ala
	290					295					300				
Gln	Gln	Ser	Lys	Val	Glu	Gly	Gly								
305					310										

&lt;210&gt; 2151

&lt;211&gt; 511

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2151

gccggcggttt acctgtgggg cccgggtcggg cgcggaaga cctggctgat ggatcaattc

60

caccaaagcc tgnncgggtg cgggcgcngg cggcagcact ttcactactt catgggctgg

120

gtgcatcagc gtccttttca gttgaccggg atcgccgatc cattgcgggc gctggctcgt

180

gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tggtcgtcaa tgacatcggt

240

gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggc

300

tgcacctcca atctgccgcc ggatcagctg tatgccgacg gttcaaccg cgaccgcttc

360

ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcgga

420

gatcatcgct tgcacccgg cgccatcgag cagcgttact gggtcgctct gccggagcag

480

ggtagcgcgt tgagccaggt gttcgacgcg t

511

&lt;210&gt; 2152

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1	5	10	15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln			
20	25	30	
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu			
35	40	45	
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala			
50	55	60	
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly			
65	70	75	80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly			
85	90	95	
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala			
100	105	110	
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys			
115	120	125	
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu			
130	135	140	
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln			
145	150	155	160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala			
165	170		

<210> 2153  
 <211> 528  
 <212> DNA  
 <213> Homo sapiens

<400> 2153  
 nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt  
 60  
 tcagtacgtg cacggcgatt ggcggcggca attgggacca ctccgcgctg atcaagggcc  
 120  
 tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga  
 180  
 tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagcccgtt  
 240  
 atgtcggctg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc  
 300  
 cacccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg  
 360  
 attgggcccg gcaaaaccgc acccgccatg gccctcgtcg tcgagaacgg ctggcaaggc  
 420  
 gaagtcaccg gcctggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa  
 480  
 gtggtcgagg ccgctcaccg ggtgccggat gccgccggcc tggcggtg  
 528

<210> 2154  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2154  
 Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala



1	5	10	15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala			
20	25	30	
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro			
35	40	45	
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly			
50	55	60	
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu			
65	70	75	80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val			
85	90	95	

&lt;210&gt; 2155

&lt;211&gt; 297

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2155

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag  
60  
ttcgccccg actgcgaggt gctcaccgtc accgattcag agggcaaccc cctcagttcg  
120  
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg  
180  
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg  
240  
cgcgccctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn  
297

&lt;210&gt; 2156

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2156

Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp		
1	15	
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser		
20	30	
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly		
35	45	
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp		
50	60	
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr		
65	75	80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala		
85	90	

&lt;210&gt; 2157

&lt;211&gt; 711

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc  
 60  
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccggt  
 120  
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc  
 180  
 ctgacgaagc ttggcgccgc cgtggtacat aagggcaacg ctttggtcca cgtttcggc  
 240  
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg  
 300  
 ccgattcatg gtgaggtgcg tcattctgtc gctaataccg atctggccaa agcaaccggt  
 360  
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga  
 420  
 gtaccgcgag ttgttgccaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg  
 480  
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg  
 540  
 tcagtcgtca ccgtgggtcga caccgctcg gcgtcagtgg tgtctcgccc ggcatccag  
 600  
 gcgcgtggtt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc  
 660  
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a  
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1				5					10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35				40					45				
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55				60					
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85					90						95	
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
		130				135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145				150					155					160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165					170						175	
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

	180		185		190										
Val	Val	Ser	Arg	Pro	Ala	Ile	Gln	Ala	Arg	Gly	Phe	Ala	Glu	Gly	Asp
	195						200					205			
Ser	Val	Phe	Ala	Glu	Ile	Thr	Asp	Gln	Ile	Val	Thr	Glu	Leu	Glu	Lys
	210					215					220				
Ala	Met	Ala	Gly	Gly	Met	Asp	Asp	Thr	His	Arg	Leu	Gln			
225					230					235					

<210> 2159  
 <211> 322  
 <212> DNA  
 <213> Homo sapiens

<400> 2159  
 tcgcgagcac actccagcct ctggagagac gacaacgcgt gaaggggcac cagcttgagg  
 60  
 ggcagcagct ccagggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta  
 120  
 cctgttttga aaagtgtgtc ctgcagatgg tgggtgagag ttcgctgccca gggccactgt  
 180  
 cttccctgcc ctgcggacac ttcttcccca ccttctctaaa gctgtggggag acctggagcc  
 240  
 gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca  
 300  
 tgggggcctt ctggttctcc tt  
 322

<210> 2160  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2160  
 Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala  
 1 5 10 15  
 Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly  
 20 25 30  
 Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu  
 35 40 45  
 Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn  
 50 55 60  
 Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys  
 65 70 75 80  
 Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp  
 85 90 95  
 Ser Val Leu Ala  
 100

<210> 2161  
 <211> 1070  
 <212> DNA  
 <213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca  
 60  
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaagggtta  
 120  
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa  
 180  
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg  
 240  
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct  
 300  
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca  
 360  
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga  
 420  
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag  
 480  
 ccagggcata aggttttgct gtccaggaag ctttgttgga aaaatgtag aagtaatggg  
 540  
 tttggtcagt atggtgagag gtgagagagg ctaaattggga tgggcataaa gggcaggcca  
 600  
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga  
 660  
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat  
 720  
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg  
 780  
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga  
 840  
 agaaagtgaa gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact  
 900  
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc  
 960  
 tggctagctg agtaaaggac catcgtataa aacagacaaa agttaagact agatggagtg  
 1020  
 gcaactaggc agatcagatg tattttttaa aggggaaact gctaagatct  
 1070

&lt;210&gt; 2162

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5				10						15	
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
		20						25					30		
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
		35					40					45			
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
	50					55				60					
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65				70					75					80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser

```

      85              90              95
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
      100              105              110
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
      115              120              125
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
      130              135              140
Tyr
145

```

<210> 2163  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2163
tatttaaatac tttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
60
ggcctccctc caatccacct ccacttcta caccacccc gctctcccc ccccccttt
120
tggttccggg ttggaaggtt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
180
agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggcgg
240
ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc
300
agacatgcca agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgctc
360
ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
420
cagacaggag tccgtcccggt ccagtcctcat catccaaga aacatccggc ccgactccct
480
gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac
540
tttgatccct tccccaaagag gaagagtgtt acctagggac aagtgtggtg cgcacaggca
600
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657

```

<210> 2164  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
1          5          10          15
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
      20          25          30
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
      35          40          45
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
      50          55          60
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65		70		75		80									
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
				85				90						95	
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
			100					105					110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
		115					120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
	130					135					140				
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145						150									

&lt;210&gt; 2165

&lt;211&gt; 962

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2165

```

ncttttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca
60
gcccgagggc cgcgcgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaadc accccagcgc ctcatccccc gaatctgttc gccatctgct gtcgcccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta ctccccacc
540
gacgtcttcg acgtggcgcc ccgggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgctgcg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa
780
tccctcgtcg ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

```

&lt;210&gt; 2166

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2166

```

Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1           5           10           15
Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
          20          25          30
Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
          35          40          45
Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50          55          60
Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
65          70          75          80
Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr
          85          90          95
Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
          100         105         110
Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
          115         120         125
Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
          130         135         140
Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
145         150         155         160
Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
          165         170         175
Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
          180         185         190
Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
          195         200         205
Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
          210         215         220
His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
225         230         235

```

&lt;210&gt; 2167

&lt;211&gt; 325

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2167

```

accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
60
catccacatt atcccgactg gaagatctcg ccagggttacg gacagtggtc gcgtagcgaa
120
cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
180
attcttcgag cggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttgggca
240
agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcgggctg
300
tgcgctgac tcccacagca taccc
325

```

<210> 2168  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2168  
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His  
 1 5 10 15  
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly  
 20 25 30  
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr  
 35 40 45  
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala  
 50 55 60  
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg  
 65 70 75 80  
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg  
 85 90 95  
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr  
 100 105

<210> 2169  
 <211> 309  
 <212> DNA  
 <213> Homo sapiens

<400> 2169  
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg  
 60  
 atcctggaga aggtcgtaaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac  
 120  
 ggggaggccc tgtccaccct cgtcgtcaat aagatccgcg gtaccttcag ctcggtggca  
 180  
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc  
 240  
 accggtggtc aggtcgtcgc tcccgagggt gggctcaagc tgcaccaggt gggcctcgag  
 300  
 gttcagggc  
 309

<210> 2170  
 <211> 103  
 <212> PRT  
 <213> Homo sapiens

<400> 2170  
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala  
 1 5 10 15  
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu  
 20 25 30  
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val  
 35 40 45  
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro



50		55		60	
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu					
65		70		75	80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln					
	85		90		95
Val Gly Leu Glu Val Gln Gly					
100					

<210> 2171  
 <211> 518  
 <212> DNA  
 <213> Homo sapiens

<400> 2171  
 gcgctaagt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat  
 60  
 atcatcaaag ttccagtga ggaagcaatt cctcgcggaa aaattaaaaa aggtaatgtt  
 120  
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt  
 180  
 cgttttgatc gcaacgcagc gggtatcttg aatgcaaaca accagccagt cggtagacgt  
 240  
 atctttggcc ctgtaaccgc tgagcttcga aatgaaaatt tcatgaagat tgtttcactg  
 300  
 gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt  
 360  
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa  
 420  
 cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca  
 480  
 agcgggcgtg gaaggcggaa tcattgaaca gaatgcat  
 518

<210> 2172  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2172	
Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala	
1	15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg	
20	30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr	
35	45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg	
50	60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg	
65	80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys	
85	95
Ile Val Ser Leu Ala Pro Glu Val Leu	
100	105

<210> 2173  
 <211> 475  
 <212> DNA  
 <213> Homo sapiens

<400> 2173  
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag  
 60  
 cgggcgcggtg ccttttgagg cggggtttcg agcattcatc tgggtgcatgc attttcgcat  
 120  
 gcatttcttg taccctcgtc atgcgtttct ccccatgcac acacattatc gcctttgcac  
 180  
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca  
 240  
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa  
 300  
 agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaaac cttcctcctc  
 360  
 aaagcgagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc  
 420  
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg  
 475

<210> 2174  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2174  
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala  
 1 5 10 15  
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile  
 20 25 30  
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys  
 35 40 45  
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg  
 50 55 60  
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr  
 65 70 75 80  
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe  
 85 90 95  
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly  
 100 105 110  
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala  
 115 120 125  
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro  
 130 135 140  
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg  
 145 150 155

<210> 2175  
 <211> 462  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2175

cgcgacaccc tctttggtgg ggccttcct tctccgaatt cggaaccct ccagactctg  
60  
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac  
120  
cgctcggta tcattgatga ccaggggcat ttcttgcac ccaaccagat cctcgtattg  
180  
ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg  
240  
acgaccacc tgettaccg tgctgccgag gccacgggc agacctgtta cgagggtaccg  
300  
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cgggtggtgag  
360  
tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatggtgt ctatgctggc  
420  
accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt  
462

&lt;210&gt; 2176

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2176

Arg	Asp	Thr	Leu	Phe	Gly	Gly	Arg	Leu	Pro	Ser	Pro	Asn	Ser	Arg	Thr
1				5					10					15	
Leu	Gln	Thr	Leu	Ala	Gln	Glu	Val	Val	Glu	Arg	Gly	Ala	Asp	Ile	Gly
			20					25					30		
Ile	Ala	Thr	Asp	Gly	Asp	Ala	Asp	Arg	Leu	Gly	Ile	Ile	Asp	Asp	Gln
		35					40					45			
Gly	His	Phe	Leu	His	Pro	Asn	Gln	Ile	Leu	Val	Leu	Leu	Tyr	Thr	Tyr
	50					55					60				
Leu	Leu	Glu	Asp	Lys	Gly	Trp	Gln	Val	Pro	Cys	Val	Arg	Asn	Leu	Ala
65				70						75				80	
Thr	Thr	His	Leu	Leu	Asp	Arg	Val	Ala	Glu	Ala	His	Gly	Gln	Thr	Cys
			85					90						95	
Tyr	Glu	Val	Pro	Val	Gly	Phe	Lys	Trp	Val	Ser	Ser	Lys	Met	Ala	Glu
			100					105					110		
Thr	Asn	Ala	Val	Ile	Gly	Gly	Glu	Ser	Ser	Gly	Gly	Leu	Thr	Val	Gln
		115					120					125			
Gly	His	Ile	Ala	Gly	Lys	Asp	Gly	Val	Tyr	Ala	Gly	Thr	Leu	Leu	Val
	130					135						140			
Glu	Met	Ile	Ala	Lys	Arg	Gly	Lys	Lys	Leu						
145						150									

&lt;210&gt; 2177

&lt;211&gt; 478

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2177

ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg  
60

accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagateccac  
 120  
 gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct ccttgtccac  
 180  
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg  
 240  
 tggccgggtg cggtgacca ggctggctcg aagtccgca gtcgacgtct gccggtcggc  
 300  
 gttcctgacc ctgagacgtg gcggcgtatc aaagacggcg aggatattcc ggatgccgag  
 360  
 gtcacgcggg ccatgtcttg ccggcgcccg cgatcagctg cccgtcgaat ggcaagcacg  
 420  
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac  
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5					10					15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
			20					25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35					40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50					55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65				70						75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
				85					90					95	
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115				120						125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135					140				
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac  
 60  
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc  
 120  
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgtg  
 180

ctccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag  
 240  
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn  
 296

<210> 2180  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 2180  
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala  
 1 5 10 15  
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg  
 20 25 30  
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg  
 35 40 45  
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile  
 50 55 60  
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln  
 65 70 75 80  
 Glu Arg Leu Ala Lys Ala Ala  
 85

<210> 2181  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2181  
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcat gcgcgcgctg  
 60  
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc  
 120  
 acgctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg  
 180  
 gtcgcgccgg ggcagacgct cgcgaagatt tcgggctctc cgaagctctg gctgatcgtc  
 240  
 gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc  
 300  
 tcgggcatc cgacgcagca tttcaccggg cgtatccgcy agatcctgcc gggcatcacc  
 360  
 accagtagcc gcacgcttca ggcgcgc  
 387

<210> 2182  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<400> 2182  
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg  
 1 5 10 15  
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

      20      25      30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35      40      45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50      55      60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
      65      70      75      80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85      90      95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100      105      110
Arg Glu Ile Leu Pro Gly Ile Thr Ser Ser Arg Thr Leu Gln Ala
      115      120      125
Arg

```

<210> 2183  
 <211> 310  
 <212> DNA  
 <213> Homo sapiens

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<400> 2183
aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggga ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggg tcaagagggt attctaggag atacaagaaa tatctcctgg
180
gggcattccaa aggaataaac actgtaatct tgagtgatgt atggttccat tgcccagagga
240
atagggatga aaaccataaa ctcccttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

```

<210> 2184  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1      5      10      15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
20      25      30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
35      40      45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
50      55      60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65      70      75      80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
85      90      95
Val Phe Gln Ala

```

100

<210> 2185  
 <211> 723  
 <212> DNA  
 <213> Homo sapiens

<400> 2185  
 ngaatatcca tgcagcagct cgtcgacaat tttgacgggtg ccatccctga cgatcttgac  
 60  
 tctcttgtga ccctgcccgg agtcgggtcgt aagaccgcca atgttgtttt aggtaatgcc  
 120  
 ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc  
 180  
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgg  
 240  
 tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggcgggcgcg ctgtcactcg  
 300  
 cggcgctcctg cctgcggggt atgcccgggt gccgagtggg gcccgtcctt cggggaaggg  
 360  
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga  
 420  
 acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca  
 480  
 tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga  
 540  
 ttgcgaaaag ttccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat  
 600  
 gccttggtga ggggcccagc atctccatgt ctcgggcgac atcgaggggc gtgaccgtcg  
 660  
 tgacgatctg ggcgtcgtgg tgtcgaccat gtcgtagtga ggctccgctc attgcgaacg  
 720  
 cgt  
 723

<210> 2186  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2186  
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro  
 1 5 10 15  
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr  
 20 25 30  
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro  
 35 40 45  
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala  
 50 55 60  
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro  
 65 70 75 80  
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg  
 85 90 95  
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115						120					125			
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130					135									

<210> 2187  
 <211> 342  
 <212> DNA  
 <213> Homo sapiens

<400> 2187  
 nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag  
 60  
 cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat  
 120  
 cgcattgatc cactgagggt atcggcgcca aagaagttgc cggggcaaaa tcccggcgag  
 180  
 gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagg  
 240  
 ctcatgggga cgcgcggacg gtcggagttc cagaaggacc acgaccgat catcttctcc  
 300  
 gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg  
 342

<210> 2188  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

	1		5		10		15								
Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn	Asp	Thr	Arg	Phe	Gly	Gly	Val	Ala
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg	Ser	Glu	Phe	Gln	Lys	Asp	His	Asp
			20				25					30			
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe	Arg	Lys	Leu	Gly	Arg	Lys	Thr	Gln
			35				40					45			
Val	His	Pro													
	50														

<210> 2189  
 <211> 1412  
 <212> DNA  
 <213> Homo sapiens

<400> 2189  
 ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg  
 60  
 cgcttctcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct  
 120  
 ggttctcttc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga  
 180  
 gggctgcca ggaggctgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc  
 240



atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgcccaccc  
 300  
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc  
 360  
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg  
 420  
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccc gcgtcgggccc  
 480  
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac  
 540  
 agtgacgacg agctcgtcgc cctcccggtt attggcgact acaccgcgag cgcagtcgtc  
 600  
 tcttttgcgt ttggcggccg cgccacagtg cttgacacca atgtacgtcg cctcatcgtc  
 660  
 agagcagagt ctgggatcgc aaactgtcca acctcgggtga cgagggctga gcgggtagtc  
 720  
 gccgacgcgt tggttcccga cgaagacgtc cgagcggcca agtgggcggt ggcgtcgtatg  
 780  
 gaattggggg cactggtatg cacggcgcggt tctccgcagt gtgaggtctg cccgatccgg  
 840  
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccggcccg tcgaggacag  
 900  
 ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc  
 960  
 cctcacgggg tgaaggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca  
 1020  
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa ccttattagc  
 1080  
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc  
 1140  
 cgctgggtta tccttagagg cggctcctcaa attggatcag ccaaaccacg tcaccgatca  
 1200  
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca  
 1260  
 cattgtcgac catctgcgtt ctttggggca ctccggagtcc atcggagatc ttaccaaact  
 1320  
 gttcgggtgtc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa  
 1380  
 gatctggaag atttccgggg gagacgtcat ga  
 1412

&lt;210&gt; 2190

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
		20					25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
	35					40					45				
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50	55	60
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala		
65	70	75
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser		80
	85	90
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser		95
	100	105
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser		110
	115	120
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr		125
	130	135
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys		140
145	150	155
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val		160
	165	170
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu		175
	180	185
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys		190
	195	200
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn		205
	210	215
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys		220
225	230	235
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys		240
	245	250
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg		255
	260	265
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn		270
	275	280
Leu Ile Ser Leu		285
290		

&lt;210&gt; 2191

&lt;211&gt; 502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2191

```

nnacgcgtcg agaatctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat
60
gactcccttg acgacgacac catttccggg ggtagccac attggtgctg cctcatggac
120
tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
180
agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
240
cgcgaggagg ccctcgagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
300
gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttgcctcaa ctacctggtc
360
aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
420
cgtgccgaga tcacgaaata ctctggggcc gatccgcaga aggtacacga cgccgtcgag
480

```

gctgggattg ccggtggtgc ac  
502

<210> 2192  
<211> 104  
<212> PRT  
<213> Homo sapiens

<400> 2192  
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile  
1 5 10 15  
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu  
20 25 30  
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp  
35 40 45  
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys  
50 55 60  
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu  
65 70 75 80  
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val  
85 90 95  
Glu Ala Gly Ile Ala Gly Gly Ala  
100

<210> 2193  
<211> 321  
<212> DNA  
<213> Homo sapiens

<400> 2193  
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc  
60  
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac  
120  
atactcctct tgccaactgg ggatttataaa attttaaaag cccctttatc tccctccaca  
180  
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga  
240  
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc  
300  
tgtgtgtgtt taggttgggg a  
321

<210> 2194  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2194  
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala  
1 5 10 15  
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu  
20 25 30  
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

	35					40					45								
Lys	Asn	Phe	Lys	Ser	Pro	Phe	Ile	Ser	Leu	His	Lys	Ser	Cys	Thr	Ala				
50						55					60								
Asn	Arg	Asp	Thr	Leu	Phe	Ser	Leu	Glu	Thr	Leu	Leu	Cys	Ala	Gln	Thr				
65					70					75				80					
Glu	Val	Pro	Leu	Pro	Trp	Asp	Ser	Ser	Leu	Ala	Xaa	Arg	Gly	Arg	Arg				
				85					90					95					
Val	Cys	Val	Leu	Cys	Val	Phe	Arg	Leu	Gly										
			100					105											

&lt;210&gt; 2195

&lt;211&gt; 504

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2195

```

nacgcgtctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gctccctggc
60
gacgggtgtgg cacaccccaa ctttggcaat atcgtccacg acctggtgct gttgcacagc
120
ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
180
gcacgaggcc tgggtgccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
360
actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
420
cgggtggacc gcaagggcat caaccgctg ctcgatgagc gctcgattgt gctgctgtcg
480
cccttgggtt actcgccac cggt
504

```

&lt;210&gt; 2196

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2196

Xaa	Ala	Ser	Pro	Tyr	Ile	Asn	Ala	His	Arg	Asp	Cys	Thr	Phe	Val	Val				
1				5					10					15					
Met	Leu	Pro	Gly	Asp	Gly	Val	Ala	His	Pro	Asn	Phe	Gly	Asn	Ile	Val				
			20					25					30						
His	Asp	Leu	Val	Leu	Leu	His	Ser	Leu	Gly	Val	Arg	Leu	Val	Leu	Val				
			35				40				45								
His	Gly	Ser	Arg	Pro	Gln	Ile	Asp	Ser	Arg	Leu	Glu	Ala	Arg	Gly	Leu				
50						55				60									
Val	Pro	Tyr	Tyr	His	Lys	Gly	Met	Arg	Val	Thr	Asp	Ala	Ser	Thr	Leu				
65					70					75				80					
Glu	Cys	Val	Ile	Asp	Ala	Val	Gly	Gln	Leu	Arg	Ile	Ala	Ile	Glu	Ala				
				85					90					95					
Arg	Leu	Ser	Met	Asp	Met	Ala	Ser	Ser	Pro	Met	Gln	Gly	Ser	Arg	Leu				

	100		105		110										
Arg	Val	Ala	Ser	Gly	Asn	Leu	Val	Thr	Ala	Arg	Pro	Ile	Gly	Val	Leu
	115						120					125			
Asp	Gly	Val	Asp	Phe	His	His	Thr	Gly	Glu	Val	Arg	Arg	Val	Asp	Arg
	130						135					140			
Lys	Gly	Ile	Asn	Arg	Leu	Leu	Asp	Glu	Arg	Ser	Ile	Val	Leu	Leu	Ser
145					150					155					160
Pro	Leu	Gly	Tyr	Ser	Pro	Thr	Gly								
				165											

&lt;210&gt; 2197

&lt;211&gt; 351

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2197

```

acaagtccgt cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggctgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

&lt;210&gt; 2198

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2198

Thr	Ser	Pro	Ser	Thr	Ile	Arg	Phe	Pro	Glu	Ala	Gly	Pro	Gly	Met	Val
1				5					10					15	
Met	Lys	Pro	Glu	Leu	Trp	Gly	Pro	Ala	Leu	Asp	Glu	Ile	Ala	Ala	Gly
		20					25						30		
Lys	Arg	Ala	Gly	Gly	Ala	Glu	Gln	Leu	Asp	Ser	Ala	Val	Gln	His	Ile
		35				40						45			
His	Gly	Ala	Thr	His	Asp	Lys	Leu	Ser	Gly	Ala	Val	Pro	Lys	Arg	Tyr
	50				55						60				
Asp	Gly	Arg	Asp	Val	Leu	Ala	Gly	Glu	Asp	Pro	Asn	Ala	Pro	Leu	Leu
65				70					75					80	
Leu	Val	Pro	Ser	Pro	Ala	Gly	Ala	Val	Phe	Ser	Gln	Asn	Lys	Ala	Gln
			85					90						95	
Ala	Trp	Ser	Asn	Glu	Asp	His	Ile	Val	Phe	Ala	Cys	Gly	Arg	Tyr	Glu
			100					105					110		
Gly	Ile	Asp	Gln	Arg											
			115												

&lt;210&gt; 2199

&lt;211&gt; 457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2199

```

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
60
ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa
120
ggcagaagcc cccgccccca cctccgagc tccgttcggg cagagcgctt gcctgcctgc
180
cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
240
atccctttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
300
ggcggcccgg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc
360
gtcctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
420
aagccactca ctctgctctg gggtaagtcc cgccggc
457

```

&lt;210&gt; 2200

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2200

```

Arg Arg Arg Pro Pro Arg Ser Ala Ser Leu Gly His Ala Lys Thr Leu
1           5           10           15
Gly Lys Ser Ala Gly Ala Arg Glu Lys Gly Trp Lys Glu Gly Thr Gly
20           25           30
Arg Ala Glu Asn Ser Pro Leu Lys Gly Arg Ser Pro Arg Pro His Pro
35           40           45
Pro Ser Ser Val Arg Ala Glu Arg Leu Pro Ala Cys Arg Cys Trp Gly
50           55           60
Arg Pro Pro Arg Pro Ala Met Pro Gly Pro Ala Thr Asp Ala Gly Lys
65           70           75           80
Ile Pro Phe Cys Asp Ala Lys Glu Glu Ile Arg Ala Gly Leu Glu Ser
85           90           95
Ser Glu Gly Gly Gly Gly Pro Glu Arg Pro Gly Ala Arg Gly Gln Arg
100          105          110
Gln Asn Ile Val Trp Arg Asn Val Leu Met Ser Leu Leu His Leu
115          120          125
Gly Ala Val Tyr Ser Leu Val Leu Ile Pro Lys Ala Lys Pro Leu Thr
130          135          140
Leu Leu Trp Gly Lys Ser Arg Arg
145          150

```

&lt;210&gt; 2201

&lt;211&gt; 336

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2201

agtactgcga tggacagcta tgctgtggat ggtggctcgca aattacatgt ttgtggtaac  
 60  
 aaccctgatt gcgatggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat  
 120  
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggctcgtttt  
 180  
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa  
 240  
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat  
 300  
 gattttcttcg tcttacgtga gggcgctgct ggttta  
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1				5					10					15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
			20					25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55						60				
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
				85				90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcacag ccgggggtggg aagctgtgca gacagccccg gatctggggac  
 60  
 gtgatggaaa actcaacaga ctggttcaga tcttggcccc gagcccagag gcaccggggga  
 120  
 cccccagggc tgtttctccc tggccacacc agtaccacac ttccaaatgc cctgtaggtg  
 180  
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc  
 240  
 ctgtccctgc ctccctccga tgctctgatg gtg  
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
      35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
 50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnnggng nnnnactggt gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtgtt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgtccttg aagtggacac ctctcctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctgtt aacatcaccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
ccgcctctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
      35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
 50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```



```

      85              90              95
Pro Arg Lys Asn Pro Ala Leu Trp Asp Leu Gly Ile Ile Gln Ala Lys
      100              105              110
Thr Arg Ser Leu Arg Asp Arg Trp Ser Glu Val Pro Arg Lys Leu Glu
      115              120              125
Phe

```

<210> 2207  
 <211> 667  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2207
atctccaacc ccgagaccct ctccaataca gccggcttcg agggctacat cgacctgggc
60
cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc
120
atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
180
accccaggta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
240
agcagcagca tctcagctgg gctgcagaag atgggtgattg agaacgatct ttccggtctg
300
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca
360
aggteectcg ggggtccagcc ctcacctgcc cgcagctcga gttactcgga agccaacgag
420
cctgatcttc agatggccaa cgggtggcaag agcctctcca tgggtggacct ccaggacgcc
480
cgcacgctgg atggggaggc aggctccccg gcggggcccc acgtcctccc cacagatggg
540
caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
600
gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
660
ggcgcgc
667

```

<210> 2208  
 <211> 222  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2208
Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
  1              5              10              15
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
      20              25              30
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
      35              40              45
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
      50              55              60
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
      85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
      100         105         110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
      115         120         125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
      130         135         140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
      145         150         155         160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
      165         170         175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
      180         185         190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
      195         200         205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
      210         215         220

```

&lt;210&gt; 2209

&lt;211&gt; 353

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2209

```

ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgttttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

&lt;210&gt; 2210

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
 1          5          10         15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
      20         25         30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
      35         40         45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
      50         55         60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```



&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt  
60  
gccggtgctt cgacacactg gggtatatcg ccctcaaagc acaggtctac gaaggttctg  
120  
acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgcgtg  
180  
tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag  
240  
atgccccggt tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg  
300  
ctcgaccaca atcgacgcgc gttggaa  
327

&lt;210&gt; 2214

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5				10					15		
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20					25					30		
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35					40					45			
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70				75					80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
				85					90					95	

&lt;210&gt; 2215

&lt;211&gt; 430

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2215

ctggggatca tgccctacat cactgcgctc atcatcctgc agctgctgac agtcgtgac  
60  
ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagctac  
120  
accggttacc tcaactctcg gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc  
180  
acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctcggtcttc  
240  
gaagtcgctg tcatgatcct gactatgacg gccggtacga ccatcgtcat gtggatgggt  
300  
gagctcatca ccgaccgagg tateggcaac ggtatgtcga tcatgatttt cactcagatt  
360

gcggcgcggtt tccctgactc gctgtgggtct atcaagggtcg ctcgaaatgg cgccgggtcag  
420  
gctcacgcgt  
430

<210> 2216  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 2216  
Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu  
1 5 10 15  
Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser  
20 25 30  
Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu  
35 40 45  
Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg  
50 55 60  
Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe  
65 70 75 80  
Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val  
85 90 95  
Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met  
100 105 110  
Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu  
115 120 125  
Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala  
130 135 140

<210> 2217  
<211> 444  
<212> DNA  
<213> Homo sapiens

<400> 2217  
accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct  
60  
atgacgtggc tcgatgacga cgtggggcgcc gacctgttga atcaggctga ttccatggac  
120  
catgccctgg aggccaccgt cccaggtcgg gtcaccacgc cggacgccca agtcatccag  
180  
acctgtgccg tgttgcggtga ccttgctcgc gtggcagtcg gccagctggg ccgaaatgac  
240  
gaggactcta gggaaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcggggag  
300  
gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct  
360  
gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta  
420  
cgagagaatg tctttgctca gtcc  
444

<210> 2218

<211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2218  
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr  
 1 5 10 15  
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu  
 20 25 30  
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro  
 35 40 45  
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val  
 50 55 60  
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp  
 65 70 75 80  
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala  
 85 90 95  
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala  
 100 105 110  
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser  
 115 120 125  
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val  
 130 135 140  
 Phe Ala Gln Ser  
 145

<210> 2219  
 <211> 688  
 <212> DNA  
 <213> Homo sapiens

<400> 2219  
 acgcgtaccg tcgttggcat gagcgtcctg ccactggaaa tttggctgtc attcagctac  
 60  
 ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaag ccgttgggag  
 120  
 tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt  
 180  
 ggaatgttcc atagtgtgca gattgcgctg catgtcagca gttaccacgg catcatggtc  
 240  
 gcttttcgcg tcgttgggta cggatggctt gcgatgcaca acttgcgta ccctgatgag  
 300  
 cgctattcga ttcgctcggc cttgataatc ggcacgcgca tccagttcac ctgggaggca  
 360  
 gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttggtat cgattctctc  
 420  
 atcgagacga atctcggcgc tccgttcattg ttgctcattg tgaaagcttg gcgcgcgcca  
 480  
 cccgaaggaa ttcctggctc taccagtccg cgcccgaccg cccgtggcac agcgcgagtc  
 540  
 tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga  
 600  
 gcgaaggggc cgggtgtagg tctccccggg gctcgttgtg gtcctctctc tgcgtgacgc  
 660

agagccgtgt gatgaggcga agtcatga  
688

<210> 2220  
<211> 189  
<212> PRT  
<213> Homo sapiens

<400> 2220  
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile  
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Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg  
20 25 30  
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu  
35 40 45  
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg  
50 55 60  
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly  
65 70 75 80  
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr  
85 90 95  
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp  
100 105 110  
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro  
115 120 125  
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met  
130 135 140  
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly  
145 150 155 160  
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met  
165 170 175  
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro  
180 185

<210> 2221  
<211> 530  
<212> DNA  
<213> Homo sapiens

<400> 2221  
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120  
ctacaacaac gcctcagtaa aacccaaaacc atcaagcaag gcatgatgca agaactactc  
180  
acagggaaaa cgaggttggg atgagccaca aggtgaattt agtgcacgag ctggataaagc  
240  
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc  
300  
ggccttataa atggtcacaa gagaacctaa atgcgctgat gagtgattta cgaatttatc  
360  
gtaacaaatc ggcttatcgg ctggggacgg tgggtttttca ttatcataat gaaccgtag  
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt  
480  
tgctgctagt caaagccatt ttagaagaac ggttgctctgc gttaacgcgt  
530

<210> 2222  
<211> 67  
<212> PRT  
<213> Homo sapiens

<400> 2222  
Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu  
1 5 10 15  
Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser  
20 25 30  
Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr  
35 40 45  
Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr  
50 55 60  
Arg Leu Val  
65

<210> 2223  
<211> 482  
<212> DNA  
<213> Homo sapiens

<400> 2223  
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120  
tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg  
180  
cgcgtcctgc gctgatatag gcctggagat gccccatggc gtgtcgggca acctcgtagt  
240  
tcaggccgtc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac  
300  
gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc  
360  
gctcccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat  
420  
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480  
gt  
482

<210> 2224  
<211> 105  
<212> PRT  
<213> Homo sapiens

<400> 2224  
Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn



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Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His			
20	25	30	
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
35	40	45	
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
50	55	60	
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
65	70	75	80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
85	90	95	
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
100	105		

<210> 2225  
 <211> 753  
 <212> DNA  
 <213> Homo sapiens

<400> 2225  
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 120  
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc  
 180  
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcgggccc ggtgggcaac  
 240  
 gaggattatt gcgctgtcat cggccgtatg gaaaacggag tgatgtgcac cctggagtcc  
 300  
 agtcgggtca gtgttgggcc gcgcgcggag tacatcgtcg agatctatgg aaccgacgga  
 360  
 tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat  
 420  
 cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt  
 480  
 ttccaaccgg gagccggaac atccatgggc tttgacgaca tgaaggctcg tgaggctgcg  
 540  
 aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg  
 600  
 gcctcagcgg aggtcaacga tgcgatcgtt gcctcctgcg ggggaccatg cctggcatga  
 660  
 cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt  
 720  
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 753

<210> 2226  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<400> 2226  
 Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

1	5	10	15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp			
20	25	30	
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val			
35	40	45	
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile			
50	55	60	
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn			
65	70	75	80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys			
85	90	95	
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile			
100	105	110	
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp			
115	120	125	
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln			
130	135	140	
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg			
145	150	155	160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val			
165	170	175	
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr			
180	185	190	
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala			
195	200	205	
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala			
210	215		

<210> 2227  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2227  
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 120  
 gactttgtac gaacgcttcg tactcaccag gcactgtggt gttaaattcccc ggtaaagcca  
 180  
 ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag  
 240  
 cgagttgcat tgtctcctgc ggggggtccag gccctgggtca agcaggggctt caatgtttgtc  
 300  
 gtggaatcag gcgcaggcga agct  
 324

<210> 2228  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2228  
 Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

      1             5             10             15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

```

&lt;210&gt; 2229

&lt;211&gt; 320

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2229

```

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
60
cccacagaga gggaacgggc ggggggaggg gaggagagaa gacagactca ggcagaaccc
120
tagctcagcc ccttctctgcg tgcctggccc tgggaggatg ccatccccag tcccctcttc
180
tgggccctgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccagcagg
300
cctcggtccc gccaagctgt
320

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&lt;210&gt; 2230

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2230

```

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
      1             5             10             15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85             90

```

&lt;210&gt; 2231

&lt;211&gt; 671

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2231

```

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt
60
tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga
120
aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cgggggtgaca ggggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcatttgtg ggataccac cactgtccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gcaactgtgaa gccagtgttg ttttacagat gaggaaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcagggtca tgtcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtcac ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcgagg ctgggggttg tccccatcgg tgatagcctg gtgcccccat
540
ggccccgat gccacaggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccagctttct tttttctatt ccttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671

```

&lt;210&gt; 2232

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2232

```

Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
 1          5          10          15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
 20          25          30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
 35          40          45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
 50          55          60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
 65          70          75          80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
 85          90          95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100          105          110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115          120          125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130          135          140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

```

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<210> 2233
<211> 6199
<212> DNA
<213> Homo sapiens
```

1639

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1320  
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1380  
tctgcctcca ctgaagtcct tcgtacagaa gcagagcagt gcaagaactt ggagctgaag  
1440  
gatcttttgc cctatggctt tgctattcat catgcaggca tgactagagt tgaccgaaca  
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ctcgtggagg atctttttgc tgataaacat attcaggttt tagtttccac cgcaactcta  
1560  
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1620  
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1680  
gccggaagac cccagtatga caccaagggt gaaggcatac tcatcacatc tcatggggag  
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1980  
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2040  
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<210> 2234

<211> 1701

<212> PRT

<213> Homo sapiens

<400> 2234

Arg	Arg	Gln	Arg	Lys	Gly	Tyr	Glu	Glu	Val	His	Val	Pro	Ala	Leu	Lys
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Pro	Lys	Pro	Phe	Gly	Ser	Glu	Glu	Gln	Leu	Leu	Pro	Val	Glu	Lys	Leu
			20					25					30		
Pro	Lys	Tyr	Ala	Gln	Ala	Gly	Phe	Glu	Gly	Phe	Lys	Thr	Leu	Asn	Arg
		35					40					45			
Ile	Gln	Ser	Lys	Leu	Tyr	Arg	Ala	Ala	Leu	Glu	Thr	Asp	Glu	Asn	Leu
	50					55					60				
Leu	Leu	Cys	Ala	Pro	Thr	Gly	Ala	Gly	Lys	Thr	Asn	Val	Ala	Leu	Met
65					70					75				80	
Cys	Met	Leu	Arg	Glu	Ile	Gly	Lys	His	Ile	Asn	Met	Asp	Gly	Thr	Ile
				85					90				95		
Asn	Val	Asp	Asp	Phe	Lys	Ile	Ile	Tyr	Ile	Ala	Pro	Met	Arg	Ser	Leu
			100					105					110		
Val	Gln	Glu	Met	Val	Gly	Ser	Phe	Gly	Lys	Arg	Leu	Ala	Thr	Tyr	Gly
		115					120					125			
Ile	Thr	Val	Ala	Glu	Leu	Thr	Gly	Asp	His	Gln	Leu	Cys	Lys	Glu	Glu
	130					135					140				
Ile	Ser	Ala	Thr	Gln	Ile	Ile	Val	Cys	Thr	Pro	Glu	Lys	Trp	Asp	Ile
145				150						155				160	
Ile	Thr	Arg	Lys	Gly	Gly	Glu	Arg	Thr	Tyr	Thr	Gln	Leu	Val	Arg	Leu
			165					170						175	
Ile	Val	Leu	Asp	Glu	Ile	His	Leu	Leu	His	Asp	Asp	Arg	Gly	Pro	Val
		180					185					190			
Leu	Glu	Ala	Leu	Val	Ala	Arg	Ala	Ile	Arg	Asn	Ile	Glu	Met	Thr	Gln
	195					200						205			
Glu	Asp	Val	Arg	Leu	Ile	Gly	Leu	Ser	Ala	Thr	Leu	Pro	Asn	Tyr	Glu
	210				215						220				
Asp	Val	Ala	Thr	Phe	Leu	Arg	Val	Asp	Pro	Ala	Lys	Gly	Leu	Phe	Tyr
225				230						235				240	
Phe	Asp	Asn	Ser	Phe	Arg	Pro	Val	Pro	Leu	Glu	Gln	Thr	Tyr	Val	Gly
			245					250					255		
Ile	Thr	Glu	Lys	Lys	Ala	Ile	Lys	Arg	Phe	Gln	Ile	Met	Asn	Glu	Ile
		260					265					270			
Val	Tyr	Glu	Lys	Ile	Met	Glu	His	Ala	Gly	Lys	Asn	Gln	Val	Leu	Val
	275					280					285				
Phe	Val	His	Ser	Arg	Lys	Glu	Thr	Gly	Lys	Thr	Ala	Arg	Ala	Ile	Arg
	290				295					300					
Asp	Met	Cys	Leu	Glu	Lys	Asp	Thr	Leu	Gly	Leu	Phe	Leu	Arg	Glu	Gly
305				310					315				320		
Ser	Ala	Ser	Thr	Glu	Val	Leu	Arg	Thr	Glu	Ala	Glu	Gln	Cys	Lys	Asn
			325				330						335		
Leu	Glu	Leu	Lys	Asp	Leu	Leu	Pro	Tyr	Gly	Phe	Ala	Ile	His	His	Ala

1644

770	775	780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His		
785	790	795
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu		800
	805	810
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe		815
	820	825
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro		830
	835	840
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr		845
	850	855
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser		860
865	870	875
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		880
	885	890
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		895
	900	905
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala		910
	915	920
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile		925
	930	935
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu		940
945	950	955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu		960
	965	970
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser		975
	980	985
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys		990
	995	1000
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile		1005
	1010	1015
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg		1020
1025	1030	1035
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser		1040
	1045	1050
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser		1055
	1060	1065
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu		1070
	1075	1080
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu		1085
	1090	1095
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro		1100
1105	1110	1115
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu		1120
	1125	1130
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln		1135
	1140	1145
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys		1150
	1155	1160
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr		1165
	1170	1175
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu		1180
1185	1190	1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys		1200

	1205		1210		1215
Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln					
1220		1225		1230	
Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp					
1235		1240		1245	
Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu					
1250		1255		1260	
Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys					
1265		1270		1275	1280
Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys					
1285		1290		1295	
Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn					
1300		1305		1310	
Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg					
1315		1320		1325	
Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg					
1330		1335		1340	
His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp					
1345		1350		1355	1360
Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala					
1365		1370		1375	
Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr					
1380		1385		1390	
Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg					
1395		1400		1405	
Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro					
1410		1415		1420	
Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val					
1425		1430		1435	1440
Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr					
1445		1450		1455	
Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu					
1460		1465		1470	
Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile					
1475		1480		1485	
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala					
1490		1495		1500	
Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
1505		1510		1515	1520
Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
1525		1530		1535	
Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
1540		1545		1550	
Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
1555		1560		1565	
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
1570		1575		1580	
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
1585		1590		1595	1600
Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
1605		1610		1615	
Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
1620		1625		1630	
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

1635                      1640                      1645  
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr  
 1650                      1655                      1660  
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly  
 1665                      1670                      1675                      1680  
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr  
 1685                      1690                      1695  
 Asp Ser Asp Ser Asp  
 1700

<210> 2235  
 <211> 586  
 <212> DNA  
 <213> Homo sapiens

<400> 2235  
 tctagaatga gtatgaggac actctcacca gagtgagggtg aaggtgtata cagctggcac  
 60  
 tcagtgttg cacattctcc actggcagaa tgactccga cgtggctcgg gctccccgga  
 120  
 agacacccct cgaagcagt gtgcctctag catcttcgac ctgaggaacc tggcagctga  
 180  
 ctcatgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga  
 240  
 agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccgga cacctgacga  
 300  
 ggatgaagcc ggggaacgct gtagccgct agagccaccc ccgagagcac tttggacaaa  
 360  
 ggatcttggc caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga  
 420  
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc  
 480  
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca  
 540  
 ccctggcccc ctctgccatc ttctctgtga cctacccctc acgcgt  
 586

<210> 2236  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 2236  
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val  
 1                      5                      10                      15  
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln  
 20                      25                      30  
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr  
 35                      40                      45  
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly  
 50                      55                      60  
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly  
 65                      70                      75                      80  
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

				85						90					95				
Gly	Pro	His	Leu	Leu	Gly	Pro	Pro	Ala	Leu	Ala	Glu	Arg	Ala	Thr	Met				
			100					105					110						
Ser	Gln	Leu	Pro	Gly	Ser	Ser	Gly	Arg	Arg	Cys									
		115					120												

&lt;210&gt; 2237

&lt;211&gt; 421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2237

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cctaggaagg cacacctgtg tcccactgca gccaaagagga agcaccctctc acactcctct
60
tggggcgag gagtgctggc cagcttgggg atagtccctg gaagtggctg ggagcactga
120
gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
180
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
240
caccctgag aaggagtctt gttgggagca ggggtggggaa gcactgtggg agaggtgtcc
300
ttggctcggg tagcagggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
360
gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
420
t
421

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&lt;210&gt; 2238

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2238

Met	Glu	Ala	Phe	Arg	Gln	Ala	Pro	Gln	Ser	Ala	Pro	Trp	Leu	Gln	Asp				
1				5				10						15					
Thr	Ser	Arg	Ser	Leu	Leu	Pro	Glu	Pro	Arg	Thr	Pro	Leu	Pro	Gln	Cys				
			20					25					30						
Phe	Pro	Thr	Leu	Leu	Pro	Thr	Arg	Leu	Leu	Leu	Thr	Gly	Gly	Leu	Ala				
		35				40						45							
Gln	Leu	Glu	Pro	Ile	Val	Gln	Val	Leu	Ala	Glu	Glu	Pro	Leu	Ala					
	50				55					60									
Pro	His	Cys	Pro	Thr	Pro	Asp	Gln	Gly	Asp	Ala	Leu	Glu	Glu	Gly	Leu				
65				70					75					80					
Asp	Leu	Ser	Ser	Ser	Leu	Ser	Ala	Pro	Asp	His	Phe	Gln	Gly	Leu	Ser				
			85					90					95						
Pro	Ser	Trp	Pro	Ala	Leu	Leu	Arg	Pro	Lys	Arg	Ser	Val	Trp	Gly	Ala				
		100					105						110						
Ser	Ser	Trp	Leu	Gln	Trp	Asp	Thr	Gly	Val	Pro	Ser								
		115					120												

&lt;210&gt; 2239

&lt;211&gt; 623

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct  
 60  
 agccattcca ggcctgggcc catgggcacc ccacacaata aggctaagag tccaggtgtc  
 120  
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga  
 180  
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct  
 240  
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca  
 300  
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc  
 360  
 atcagtgggt cagttagtgc tgcaagacct ttgggcagct ctcgtggccc tggccggcct  
 420  
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc gggcggtct  
 480  
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat  
 540  
 tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt  
 600  
 cccactataa agcctaagtg cac  
 623

&lt;210&gt; 2240

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10					15	
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
			20					25					30		
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
		35				40					45				
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50				55					60					
Ser	Gly	Pro	Val	Pro	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro	
65				70				75					80		
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85					90					95		
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
		130				135						140			
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145				150				155					160		
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg





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          100          105          110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
          115          120          125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
          130          135          140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145          150          155          160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
          165          170          175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
          180          185          190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
          195          200          205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
          210          215

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<210> 2243  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

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<400> 2243
gaattcagca tttaaagtgc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtccctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgcctctcc tgtgtctgcc tgtcttgttt
360
tacctcccat cctgggacct tgga
384

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<210> 2244  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

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<400> 2244
Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1          5          10          15
Trp Ala Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
          20          25          30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
          35          40          45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
          50          55          60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65          70          75          80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

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85                                      90                                      95  
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser  
 100                                      105

<210> 2245  
 <211> 632  
 <212> DNA  
 <213> Homo sapiens

<400> 2245  
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct  
 60  
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt  
 120  
 gaggcccaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catggtgttt  
 180  
 gcggccgaac tgtcgaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgcg  
 240  
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg  
 300  
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg  
 360  
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag  
 420  
 gccgcttttag ccgagtgtga cgaccgggtg tccgcacggg aaaaacgttc ggaaatgaac  
 480  
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt  
 540  
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccga  
 600  
 cttaagttca gtatcgacgg catgaatccg ga  
 632

<210> 2246  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 2246  
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His  
 1                                      5                                      10                                      15  
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr  
 20                                      25                                      30  
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp  
 35                                      40                                      45  
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu  
 50                                      55                                      60  
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg  
 65                                      70                                      75                                      80  
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys  
 85                                      90                                      95  
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val  
 100                                      105                                      110  
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125  
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala  
 130 135 140  
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg  
 145 150

<210> 2247  
 <211> 324  
 <212> DNA  
 <213> Homo sapiens

<400> 2247  
 gggcggttcgc ctccagggtt ctccccgaca ctggatgccca acctgcccag gggcagaagg  
 60  
 gaggttggggc gtgggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg  
 120  
 cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctggggc  
 180  
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgctctctg ctgggttgca  
 240  
 taagccagcg attcccaacc ccggtgttac ctggaagcta cccaggagc ttctggagaa  
 300  
 tgtgccgtgt gagccatccc cctg  
 324

<210> 2248  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2248  
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg  
 1 5 10 15  
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly  
 20 25 30  
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln  
 35 40 45  
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu  
 50 55 60  
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His  
 65 70 75 80  
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser  
 85 90 95  
 Val Gly Glu Asn Pro Gly Gly Glu Arg  
 100 105

<210> 2249  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2249  
 gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa  
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cggggttttc ccattcccac  
 120  
 ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa  
 180  
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcggtt tagcaccctc  
 240  
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggccctgggag gaactgggag  
 300  
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg  
 360  
 gccacatggg gacaggcctc ctgggggcag atct  
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1				5					10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
			20					25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35					40					45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55					60				
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70					75				80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
				85				90						95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
				100											

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca  
 60  
 gtggaatagt cagggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccactcgcca  
 120  
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa  
 180  
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg  
 240  
 agtttaataca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag  
 300  
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct  
 360  
 acatcgtcaa cgttatatatt tgatagtttg acgggttaatg ctggtaatgg tggttttctt  
 420

cattgcattc agatggatac atctgtcaac gccgctaatac aggttggttc tgttggtgct  
 480  
 gatattgctt ttgatgccga ccctaaattt ttgacctgtt tggttcgctt tgagtcttct  
 540  
 tcggttccga ctaccctccc gactgcctat gatgtttatc ctttggatgg tcgccatgat  
 600  
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttctcg tacg  
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
			35				40					45			
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70				75					80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85					90					95		
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100				105						110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
	115				120							125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg  
 60  
 cactgagcac cagcaagcag gcccgcttg attgccacc gggtcacgaa aacgatgaaa  
 120  
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc  
 180  
 agcgccgcca cgccgaggac cgctcaccg aatactggg ccaactggaa gatatcgctc  
 240  
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc  
 300  
 tggaagcggc aaagttgacc gccttg  
 327

<210> 2254

<211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2254

```

Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1           5           10           15
Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
      20           25           30
Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
      35           40           45
Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
      50           55           60
Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
65           70           75           80
Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
      85           90           95
Leu Thr Ala Leu
      100

```

<210> 2255  
 <211> 357  
 <212> DNA  
 <213> Homo sapiens

<400> 2255

```

nngetagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca
60
aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
120
cctgtacagg gcagtgacgc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
180
actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg
240
gaagggcctt cagagctctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag
300
cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca
357

```

<210> 2256  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<400> 2256

```

Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1           5           10           15
Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
      20           25           30
Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
      35           40           45
Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
      50           55           60
Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

65		70		75		80
Glu Gly Pro Ser	Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val	Val Glu				
	85	90	95			
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu						
	100	105	110			
Ala Val Asp Ala Lys Cys Ala						
115						

<210> 2257  
 <211> 626  
 <212> DNA  
 <213> Homo sapiens

<400> 2257  
 nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc  
 60  
 ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa  
 120  
 gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca  
 180  
 ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agagggtgaa  
 240  
 gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt  
 300  
 actactgttg gcaatgatga tgatggacta aatcagcaga ttcctaggaa ggaaaatgaa  
 360  
 gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata  
 420  
 tctcctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt  
 480  
 gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag  
 540  
 tataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt  
 600  
 gtatacattg ctgagaactg acgcgt  
 626

<210> 2258  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2258  
 Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn  
 1 5 10 15  
 Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro  
 20 25 30  
 Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln  
 35 40 45  
 Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu  
 50 55 60  
 Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu  
 65 70 75 80  
 Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

      85              90              95
Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Asp Gly Leu Asn Gln
      100              105              110
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
      115              120              125
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
      130              135              140
Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
145              150              155              160
Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
      165              170              175
Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
      180              185

```

&lt;210&gt; 2259

&lt;211&gt; 425

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2259

```

acgcgtcaca atgataaagc cattatattc atcaagaggt aaatcattct tgaaattttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acggtcattc acgactgtaa cacgacagcc aataaacaat agcaaatacag taatagctcg
180
gctaacaatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaatcc
300
ttcaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatccccttg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

```

&lt;210&gt; 2260

&lt;211&gt; 141

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2260

```

Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
 1              5              10              15
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
      20              25              30
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
      35              40              45
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
      50              55              60
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
      65              70              75              80
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr

```



				85					90					95					
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu				
				100						105				110					
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu				
		115					120					125							
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg							
	130						135					140							

<210> 2261  
 <211> 660  
 <212> DNA  
 <213> Homo sapiens

<400> 2261  
 ngctagctgc tgctcctgag gatcggccgc agaattattgc tgccgatctg tccgggttgc  
 60  
 ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgccgt gggagcatag  
 120  
 tgtcgggtgca cgctgaccga gaggtccgtg cggagagtag tcccgatgat atttgccggc  
 180  
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccc  
 240  
 acgatgccgg gaggtctcttc gacaagcttc actgaacggg gttcaattgg tcccaacggc  
 300  
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat  
 360  
 ggtttccagg ccaccgacct ggctcttacc gcggtctttg cagccctcat tgctgtgcta  
 420  
 gccgtcatcc cgccgatgtt catgggtggg gcggtccctt ttgcccttca gatgggttgc  
 480  
 gtcattgtgg cgccgatggt gctgggaagt atccgtggcg gatgcgcggg aggccttgtat  
 540  
 atccttgtcg gcgcgctggg gctgcccgtc ttcagcgggt ggtctagcgg gattggcgct  
 600  
 ctgggtgggt ccactgggtg gtatctatgg ggatggctga tcggcgcttt cgtggcgggt  
 660

<210> 2262  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2262  
 Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly  
 1 5 10 15  
 Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg  
 20 25 30  
 Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu  
 35 40 45  
 Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro  
 50 55 60  
 Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val  
 65 70 75 80  
 Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

```

      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
      130              135

```

<210> 2263  
 <211> 491  
 <212> DNA  
 <213> Homo sapiens

<400> 2263  
 nacgcgttcc cggtcgaccg aggcaaaggc aaaagtaagc aggggtgccc tagtccccgt  
 60  
 tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg  
 120  
 gagggcaccc ggtctcgac cggcgcaatg ggcaccttca aacctggggc tgccgcattg  
 180  
 gctattttcac gtgggggttcc gggttatcccc attgcttttag taggagcatg ggcggctatg  
 240  
 ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac  
 300  
 cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag  
 360  
 gtcattgagt tgcacgacca aaccgcccc gcctacggca tgccaaccct tgacgaatac  
 420  
 ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac  
 480  
 tcgacgtgca c  
 491

<210> 2264  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 2264  
 Xaa Ala Phe Pro Val Asp Arg Gly Lys Gly Lys Ser Lys Gln Gly Ala  
 1 5 10 15  
 Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp  
 20 25 30  
 Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly  
 35 40 45  
 Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg  
 50 55 60  
 Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met  
 65 70 75 80  
 Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val  
 85 90 95  
 Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln  
 100 105 110  
 Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

	115		120		125										
Ala	Arg	Ala	Tyr	Gly	Met	Pro	Thr	Leu	Asp	Glu	Tyr	Gly	Arg	His	Arg
	130				135					140					
Ala	Leu	Ser	Gln	Ala	Ser	Glu	Ser	Gly	Asp	Thr	Ala	Ser	Thr	Asn	His
145					150					155				160	
Ser	Thr	Cys													

<210> 2265  
 <211> 328  
 <212> DNA  
 <213> Homo sapiens

<400> 2265  
 ccatgggaat aggccaacac ggatggatct actgtataac ttgcctgcca tcaggaaaga  
 60  
 gtcaacacgg cagacacatg ctggcagaaa ccctgctgga gttgccctg agcattgatg  
 120  
 cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaatgac  
 180  
 cggaagggct cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata  
 240  
 tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc  
 300  
 tttagcacgt gactgggacc actggaca  
 328

<210> 2266  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2266  
 Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro  
 1 5 10 15  
 Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu  
 20 25 30  
 Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly  
 35 40 45  
 Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly  
 50 55 60  
 Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile  
 65 70 75 80  
 Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu  
 85 90 95  
 Thr Pro Asn Leu  
 100

<210> 2267  
 <211> 370  
 <212> DNA  
 <213> Homo sapiens

<400> 2267

agatctatgc aggtagcgt ggtctccggg gggtaagttg tccactccct gtcagatggc  
 60  
 agaccatgga gggctaatagc aggetgggaa ggctaggcag agttcccaga aacagggtcac  
 120  
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac  
 180  
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg  
 240  
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaaccctg accttgaagg  
 300  
 acaggaaca agtcatttac gtatgttgta ggcctagagc aagggttgc agagatgggc  
 360  
 gtcaacgcgt  
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5				10						15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
		35					40					45			
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
	50					55					60				
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75				80	
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
				85						90					

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

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 60  
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc  
 120  
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtcggca  
 180  
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag  
 240  
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgccaa atgcgattat  
 300  
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg  
 360  
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgcgt ctccttgctg  
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt  
 480  
 cctcgaggtc tagagatcgt ctctctgc  
 507

<210> 2270  
 <211> 169  
 <212> PRT  
 <213> Homo sapiens

<400> 2270  
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln  
 1 5 10 15  
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg  
 20 25 30  
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr  
 35 40 45  
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala  
 50 55 60  
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys  
 65 70 75 80  
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala  
 85 90 95  
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala  
 100 105 110  
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala  
 115 120 125  
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val  
 130 135 140  
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg  
 145 150 155 160  
 Pro Arg Gly Leu Glu Ile Val Ser Cys  
 165

<210> 2271  
 <211> 573  
 <212> DNA  
 <213> Homo sapiens

<400> 2271  
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc  
 60  
 ccgatgggtcg acgaaagcct ggaacagttc gccagttgc tcaaaacccg cacctcgga  
 120  
 gaaggcatgg cgccgttgac ctcggacgcg gtggcgcggt tggccactta cagcgcacgg  
 180  
 ctggcggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actggtcagc  
 240  
 gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa  
 300  
 cgggcgctca aggccaaggc cagcgtacc gggcggtgat cggcgcggtat tctcgacgac  
 360  
 atgctcgctg gggtcaccc gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg  
 420

ctgacggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggat ttccgccacg  
 480  
 gtgtaccggg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg  
 540  
 atccactcca agggcgtgat gacccctacc ggt  
 573

<210> 2272  
 <211> 191  
 <212> PRT  
 <213> Homo sapiens

<400> 2272  
 Xaa Ala Asp Pro Asp Phe Gln Glu Met Leu Arg Ala Leu Val Asp Phe  
 1 5 10 15  
 Asp Glu Asp Ile Pro Met Val Asp Glu Ser Leu Glu Gln Phe Ala Gln  
 20 25 30  
 Leu Leu Lys Thr Arg Thr Ser Glu Gly Met Ala Pro Leu Thr Ser  
 35 40 45  
 Asp Ala Val Ala Arg Leu Ala Thr Tyr Ser Ala Arg Leu Ala Asp His  
 50 55 60  
 Gln Gly Arg Val Ser Ala Arg Ile Gly Asp Leu Phe Gln Leu Val Ser  
 65 70 75 80  
 Glu Ala Asp Phe Ile Arg His Leu Ala Gly Asp Glu Met Thr Asp Ala  
 85 90 95  
 Gly His Ile Glu Arg Ala Leu Lys Ala Lys Ala Thr Arg Thr Gly Arg  
 100 105 110  
 Val Ser Ala Arg Ile Leu Asp Asp Met Leu Ala Gly Val Ile Leu Ile  
 115 120 125  
 Asp Thr Ala Gly Ala Ala Val Gly Lys Cys Asn Gly Leu Thr Val Leu  
 130 135 140  
 Glu Val Gly Asp Ser Ala Phe Gly Val Pro Ala Arg Ile Ser Ala Thr  
 145 150 155 160  
 Val Tyr Pro Gly Gly Ser Gly Ile Val Asp Ile Glu Arg Glu Val Asn  
 165 170 175  
 Leu Gly Gln Pro Ile His Ser Lys Gly Val Met Ile Leu Thr Gly  
 180 185 190

<210> 2273  
 <211> 4355  
 <212> DNA  
 <213> Homo sapiens

<400> 2273  
 tctttccagc atgcctccgg cttcttgggg gaacacagtc ccggtggtca gaggtcctgc  
 60  
 aggggaggcc tctctctgga acgectacce aactccatcg cctcccgtt ccgcctgaca  
 120  
 gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc  
 180  
 ctgcaggaat tggagaagac cacaaataac agcacgtcga ggcacatgaa aggctgtcac  
 240  
 ccgcttgact atgagctcac ctacttcctg gaagctgcc tccagagcgc ctatgtgaaa  
 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgcggact  
360  
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&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2274

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Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
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Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
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Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
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Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
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 <211> 167  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr  
 50 55 60  
 Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr  
 65 70 75 80  
 Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser  
 85 90 95  
 Thr Ile Ala Ser Glu Thr Thr Leu Ser Ser Lys Ser His Gln Ser Thr  
 100 105 110  
 Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu  
 115 120 125  
 Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

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 35 40 45  
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val  
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<211> 331

<212> DNA

<213> Homo sapiens

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<210> 2280

<211> 91

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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Pro Ser Glu Asp Ser Arg Gly Thr Phe Val Pro Asp Ile Leu His Gly  
35 40 45  
Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp  
50 55 60  
Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro  
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Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg  
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<210> 2283  
<211> 404  
<212> DNA  
<213> Homo sapiens

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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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Pro	Gly	Pro	Ala	Pro	Gly	Arg	Ala	Thr	Glu	Gly	Arg	Ala	Ala	Leu	Asp
		35				40					45				
Ile	Val	His	Pro	Val	Arg	Val	Asp	Ala	Gly	Gly	Ser	Phe	Leu	Ser	Tyr
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Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
65				70					75					80	
Asp	Ala	Pro	Ala	Phe	Tyr	Glu	Leu	Gln	Tyr	Arg	Gly	Arg	Glu	Leu	Arg
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Phe	Asn	Leu	Thr	Ala	Asn	Gln	His	Leu	Leu	Ala	Pro	Gly	Phe	Val	Ser
		100					105						110		
Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
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Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
	130				135						140				
Gly	Gly	Leu	Ala	Ala	Ile	Ser	Ala	Cys	Asp	Gly	Leu	Lys	Gly	Val	Phe
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
			165					170						175	
Ala	Arg	Pro	Gly	His	Ala	Gln	Pro	His	Val	Val	Tyr	Lys	Arg	Gln	Ala
		180				185							190		
Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

1677

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 Glu Tyr Phe Ala Lys Lys Leu Arg Asp Ala Val Val Asp Gly Thr Pro  
                                  645                      650                      655  
 Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys  
                                  660                      665                      670  
 Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp  
                                  675                      680                      685  
 Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser  
                                  690                      695                      700  
 Gly Thr Phe Xaa Arg Arg Pro Arg Val Xaa Gly Tyr Val Asp Val Gly  
 705                      710                      715                      720  
 Leu Ile Pro Ala Gly Ala Arg Glu Ile Arg Ile Gln Glu Val Ala Glu  
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 Ala Ala Asn Phe Leu Ala Leu Arg Ser Glu Asp Pro Glu Lys Tyr Phe  
                                  740                      745                      750  
 Leu Asn Gly Gly Trp Thr Ile Gln Trp Asn Gly Asp Tyr Gln Val Ala  
                                  755                      760                      765  
 Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr  
                                  770                      775                      780  
 Ser Pro Gly Pro Thr Lys Glu Pro Val Trp Ile Gln Val Pro Ala Ser  
 785                      790                      795                      800  
 Arg Gly Pro Gly Gly Gly Ser Arg Gly Gly Val Pro Arg Pro Ser Thr  
                                  805                      810                      815  
 Leu His Gly Arg Ser Arg Pro Gly Gly Val Ser Pro Gly Ser Val Thr  
                                  820                      825                      830  
 Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val  
                                  835                      840                      845  
 Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Ala Val His Arg Gly  
                                  850                      855                      860  
 Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu  
 865                      870                      875                      880  
 Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser  
                                  885                      890                      895  
 Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly  
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 His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp  
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 Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val  
                                  930                      935                      940  
 Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp  
 945                      950                      955                      960  
 Pro Leu Gly Arg Pro Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro  
                                  965                      970                      975  
 Cys Pro Ala Arg Trp Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser  
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 Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser  
                                  995                      1000                      1005  
 Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His  
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 Leu Pro Arg Pro Pro Thr Glu Thr Pro Cys Asn Arg His Val Pro Cys  
 1025                      1030                      1035                      1040  
 Pro Ala Thr Trp Ala Val Gly Asn Trp Ser Gln Cys Ser Val Thr Cys  
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 Gly Glu Gly Thr Gln Arg Arg Asn Val Leu Cys Thr Asn Asp Thr Gly

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Val	Pro Cys Asp Glu Ala Gln Gln	Pro Ala Ser Glu	Val Thr Cys Ser		
	1075		1080		1085
Leu	Pro Leu Cys Arg Trp Pro Leu Gly Thr	Leu Gly Pro Glu Gly Ser			
	1090		1095		1100
Gly	Ser Gly Ser Ser Ser His Glu Leu Phe Asn	Glu Ala Asp Phe Ile			
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Pro	His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser	Pro Lys Pro			
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Gly	Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu				
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Pro	Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile				
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Asn	Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu				
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Asp	Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro				
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Ala	Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala				
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Ala	Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro				
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Ser	Gln Ala Gly Arg Ser Pro Pro Pro Pro Ser Glu Gln Thr Pro Gly				
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Asn	Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala				
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Pro	Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp				
1265		1270		1275	1280
Gly	Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val				
	1285		1290		1295
Gly	Lys Asp Ser Gln Ser Gln Leu Pro Pro Trp Arg Asp Arg Thr				
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Asn	Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro				
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His	Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val				
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Gly	Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr				
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Gly	Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro				
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Val	Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro				
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Pro	Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu				
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Glu	Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp				
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Leu	Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr				
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Gly	Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly				
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Gln	Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu				
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Ser	Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu				
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Thr	Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp				

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Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn		1550
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Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp		1565
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Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His		
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Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala		1600
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Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu		1615
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Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro		1630
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Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn		1645
1650	1655	1660
Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser		
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Ala Pro Cys Gly Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn		1680
	1685	1690
Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu		1695
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Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro		1710
1715	1720	1725
Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys		
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Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr		
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Gly His Gln Arg Val Ala Arg Arg		1775
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&lt;210&gt; 2287

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2287

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<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

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			20					25					30		
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
		35					40					45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
	50					55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
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<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

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 360  
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<210> 2290  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<400> 2290  
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 Ile Asp Tyr Thr Gly Gly Leu Lys His Gln Ile Leu Gln Ser His Gly  
 35 40 45  
 Gln Asp Ala Glu Leu Ser Gly Thr Leu Ser Leu Val Leu Thr Gln Gly  
 50 55 60  
 Cys Lys Arg Ile Xaa Arg Gly Tyr Trp Phe Lys Asn Trp Pro Pro Thr  
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 Thr Lys Thr Ser Thr Ala Val Phe Leu Gly Leu Glu Lys Pro Leu Met  
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 Arg Ile His Phe  
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<210> 2291  
 <211> 573  
 <212> DNA  
 <213> Homo sapiens

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<210> 2292  
<211> 140  
<212> PRT  
<213> Homo sapiens

<400> 2292  
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Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu  
35 40 45  
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile  
50 55 60  
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val  
65 70 75 80  
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala  
85 90 95  
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val  
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Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser  
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Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp  
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<210> 2293  
<211> 358  
<212> DNA  
<213> Homo sapiens

<400> 2293  
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120  
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cacggagagt tctatcttga cgacgagcag tgggccacgc tcatggccgg gtcctctttc  
240  
gaggcgaatc cgcgcatata gagcaacttt gattccgagg gcgctgttgt ggatccggat  
300  
tccgattcac ttgctggggc tgatcgagat gcccgaggtg cttcggatgc atgccttc  
358

<210> 2294  
<211> 115  
<212> PRT  
<213> Homo sapiens

<400> 2294  
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

1	5	10	15
Val Asn Thr Val	Ala Lys Asn Trp	Leu Asn Arg Leu	Asn Thr Pro Asp
20	25	30	
Met Lys Pro Thr	Glu Glu Ile Lys	Arg Gln Phe Gln	Gly Leu His Trp
35	40	45	
Leu Gly Arg Lys	Tyr Gly Leu Asn	His Gly Glu Phe	Tyr Leu Asp Asp
50	55	60	
Glu Gln Trp Ala	Thr Leu Met Ala	Gly Ser Ser Phe	Glu Ala Asn Pro
65	70	75	80
Arg Ile Lys Ser	Asn Phe Asp Ser	Glu Gly Ala Val	Val Asp Pro Asp
85	90	95	
Ser Asp Ser Leu	Ala Gly Ala Asp	Arg Asp Ala Arg	Gly Ala Ser Asp
100	105	110	
Ala Cys Leu			
115			

&lt;210&gt; 2295

&lt;211&gt; 546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2295

```

ggcaccgatc cgagtgggtg tgccgggatt aggnccgatc tanaaacatt ctccgccctt
60
ggggcgatatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggt gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg ccggaggcgg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

&lt;210&gt; 2296

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2296

Gly Thr Asp Pro	Ser Gly Gly Ala	Gly Ile Arg Xaa	Asp Leu Xaa Thr
1	5	10	15
Phe Ser Ala Leu	Gly Ala Tyr Gly	Cys Ser Val Ile	Thr Ala Leu Val
20	25	30	
Ala Gln Asn Thr	Arg Gly Val Gln	Ser Val Tyr Arg	Ile Glu Pro Asp

```

      35              40              45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
      50              55              60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
65              70              75              80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85              90              95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100             105             110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115             120             125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130             135             140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
145             150             155             160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165             170             175
Asp Trp Leu Phe Thr Arg
      180

```

<210> 2297  
 <211> 414  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2297
gggaattccg ggcccttccc cccaagcccc ggtaattttt tgtattttta aaaaaaaagg
60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
120
caccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc gggggggggca
180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggggtct ctgggttaata
240
aatgttgaga tgtagggtta ggtgagatta aacaggttct ttttttcatg atttctcgga
300
gtctttatga tgtccacac cagtacttct caaagctgac tgtgtataca aaacactggg
360
gatctgaccc acatgtaaag tctgatttct ttgggtctggg gcaggcctga aatn
414

```

<210> 2298  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
1              5              10              15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
20             25             30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
35             40             45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50  
Val Glu Met  
65

55

60

<210> 2299  
<211> 987  
<212> DNA  
<213> Homo sapiens

<400> 2299  
ngagatgtct aagttatattt ttttttcccg gaaggcaaat ggctggcgtg gaagcacaac  
60  
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctctgacga  
120  
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac  
180  
agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga  
240  
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg  
300  
cgcaagtcct ctccagatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc  
360  
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga  
420  
acaacaaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga  
480  
gctgcccaatt tatatttcct gttcctagtt gtcctgaact gggtagccttt ggtagaagcc  
540  
ttccaaaagg aaatcaccat gttgcctctg gtgggtgggtcc ttacaattat cgcaattaaa  
600  
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttttaataact  
660  
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt  
720  
ggggacttta ttcgcctctc ctgcaacgag gtcacccctg cagacatggg actactcttt  
780  
tccactgatc cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat  
840  
ttaaaacaga ggcagggtgg tgggggatat gcagaacagg actctgaagt tgatcctgag  
900  
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc  
960  
ttcctagaac attccaacaa agaacgc  
987

<210> 2300  
<211> 266  
<212> PRT  
<213> Homo sapiens

<400> 2300  
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile  
1 5 10 15  
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

	20		25		30										
Leu	Leu	Ala	Cys	Gly	Arg	Lys	Ser	Ser	Gln	Ile	Pro	Lys	Leu	Ser	Gly
	35						40					45			
Arg	His	Arg	Ile	Val	Val	Pro	His	Ile	Gln	Pro	Phe	Lys	Asp	Glu	Tyr
	50					55					60				
Glu	Lys	Phe	Ser	Gly	Ala	Tyr	Val	Asn	Asn	Arg	Ile	Arg	Thr	Thr	Lys
65					70					75					80
Tyr	Thr	Leu	Leu	Asn	Phe	Val	Pro	Arg	Asn	Leu	Phe	Glu	Gln	Phe	His
				85					90					95	
Arg	Ala	Ala	Asn	Leu	Tyr	Phe	Leu	Phe	Leu	Val	Val	Leu	Asn	Trp	Val
			100					105					110		
Pro	Leu	Val	Glu	Ala	Phe	Gln	Lys	Glu	Ile	Thr	Met	Leu	Pro	Leu	Val
	115						120					125			
Val	Val	Leu	Thr	Ile	Ile	Ala	Ile	Lys	Asp	Gly	Leu	Glu	Asp	Tyr	Arg
	130					135					140				
Lys	Tyr	Lys	Ile	Asp	Lys	Gln	Ile	Asn	Asn	Leu	Ile	Thr	Lys	Val	Tyr
145					150					155					160
Ser	Arg	Lys	Glu	Lys	Lys	Tyr	Ile	Asp	Arg	Cys	Trp	Lys	Asp	Val	Thr
				165					170					175	
Val	Gly	Asp	Phe	Ile	Arg	Leu	Ser	Cys	Asn	Glu	Val	Ile	Pro	Ala	Asp
			180					185					190		
Met	Val	Leu	Leu	Phe	Ser	Thr	Asp	Pro	Asp	Gly	Ile	Cys	His	Ile	Glu
	195						200					205			
Thr	Ser	Gly	Leu	Asp	Gly	Glu	Ser	Asn	Leu	Lys	Gln	Arg	Gln	Val	Val
	210					215					220				
Arg	Gly	Tyr	Ala	Glu	Gln	Asp	Ser	Glu	Val	Asp	Pro	Glu	Lys	Phe	Ser
225					230					235					240
Ser	Arg	Ile	Glu	Cys	Glu	Ser	Pro	Asn	Asn	Asp	Leu	Ser	Arg	Phe	Arg
				245					250					255	
Gly	Phe	Leu	Glu	His	Ser	Asn	Lys	Glu	Arg						
		260						265							

&lt;210&gt; 2301

&lt;211&gt; 390

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg

60

nncgccacct ctccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag

120

nncgttgcca cggtgaattc aacacaaacg caanactaca tgcccgattht cccacccccg

180

gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga

240

ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt

300

accagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag

360

aataacggaa ttcgagtggg ccccgggcgt

390

&lt;210&gt; 2302

<211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2302

```

Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1           5           10           15
Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
          20           25           30
Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
          35           40           45
Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
          50           55           60
Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
          65           70           75           80
Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
          85           90           95
Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
          100          105          110
Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
          115          120          125
Gly Arg
          130

```

<210> 2303  
 <211> 638  
 <212> DNA  
 <213> Homo sapiens

<400> 2303

```

nnggatccag gctgccccctg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct
60
gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggt
120
atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
180
ctcttcttcc tgtcccgggg catcgagggc actggctcgg ccagctactc caccatcgcg
240
cccaccgtcc tgggcgacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc
300
tacatcttta tcccgttgg aagtggctct ggctacgtgc tggggtcggc tgtgacgatg
360
ctgactggga actggcgctg ggccctccga gtcatgccct gcctggaggc cgtggccttg
420
atcctgctta tctgctggt tccagacca ccccggggag ctgccgagac acagggggag
480
ggggccgtgg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
540
tggagttttg tgtggctgac cctcggagtg accgccatgg cctttgtgac tggagccctg
600
gggttctggg cccccaagtt tctgctcgag gcacgcgt
638

```

<210> 2304

<211> 212  
 <212> PRT  
 <213> Homo sapiens

<400> 2304  
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys  
 1 5 10 15  
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser  
 20 25 30  
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly  
 35 40 45  
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu  
 50 55 60  
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala  
 65 70 75 80  
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val  
 85 90 95  
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr  
 100 105 110  
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala  
 115 120 125  
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile  
 130 135 140  
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu  
 145 150 155 160  
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr  
 165 170 175  
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala  
 180 185 190  
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu  
 195 200 205  
 Leu Glu Ala Arg  
 210

<210> 2305  
 <211> 340  
 <212> DNA  
 <213> Homo sapiens

<400> 2305  
 gccccgcct ctatcttccg gcatcgtcac agtcgcatcg tgacgggtact ggctggagtc  
 60  
 tcggaccagc acactttgac cgtcgtggtc gcctcgtgac atggggtaac gcgaacctcg  
 120  
 tcgctcctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg  
 180  
 cccgcaacgc tattggtgac gcagcactcg cagctggtct cgaccgactc gtccacacca  
 240  
 cggcgtcggg gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcage gctgctgccc  
 300  
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcg  
 340

<210> 2306

<211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 2306  
 Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn  
 1 5 10 15  
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser  
 20 25 30  
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu  
 35 40 45  
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly  
 50 55 60  
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser  
 65 70 75 80  
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys  
 85 90 95  
 Asp Asp Ala Gly Arg  
 100

<210> 2307  
 <211> 360  
 <212> DNA  
 <213> Homo sapiens

<400> 2307  
 ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa  
 60  
 gccaaaggcac tgggtggggc tggcagtggg agcaagggtc cagcaggtgg cggaagcaag  
 120  
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat  
 180  
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct  
 240  
 ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttcttcc tgagccccc  
 300  
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca  
 360

<210> 2308  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 2308  
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro  
 1 5 10 15  
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys  
 20 25 30  
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser  
 35 40 45  
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu  
 50 55 60  
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro



```

65              70              75              80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
              85              90              95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
              100              105              110
Gly Leu Pro Lys Thr Lys Glu Ala
              115              120

```

<210> 2309  
 <211> 395  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggtgc ctgccctgtg
60
cactctctgc cctggggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattctcat gggggaggca gagccaccc gtctgtcttc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccaggg
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccttg agtctcctcc cagaccacgc
300
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggt cacttgagt
360
tgttgtgtta tgcccacaac aggettgcgc tcacc
395

```

<210> 2310  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
100          105

```

<210> 2311  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2311  
gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag  
60  
ggctttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgtctt cgcccgggcg  
120  
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc  
180  
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg  
240  
gccaacattc gacagaacat cgcgatcgcg atcggggctaa aggcggtggt ccttgtaacg  
300  
accgtcgctg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag  
360  
cttgtgacca tgaacgcg  
378

<210> 2312  
<211> 126  
<212> PRT  
<213> Homo sapiens

<400> 2312  
Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu  
1 5 10 15  
Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn  
20 25 30  
Asp Cys Asp Ala Leu Ala Ala Asp Val Gly Ser Pro Met Gly Gly  
35 40 45  
Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Val Leu His Gly  
50 55 60  
Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met  
65 70 75 80  
Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val  
85 90 95  
Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile  
100 105 110  
Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala  
115 120 125

<210> 2313  
<211> 669  
<212> DNA  
<213> Homo sapiens

<400> 2313  
ctagtggcat ggtctcgctg gtcttttagtg gagcataccg acacatcggt gactcaaacg  
60  
atccgaatca tggctcgctc tggttggcct ggaaccatta acgtacgcct caccatcgcg  
120  
ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcgggtac gacagcgggg  
180  
ccgcttggtat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca  
240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg  
 300  
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat  
 360  
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt  
 420  
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc  
 480  
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca  
 540  
 tttaatgagg gcccgaccca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca  
 600  
 ctgcactggg gcatcgcta acccgcgga gctcgaaagg acaaggacgg gaaggcagga  
 660  
 ttcacgcgt  
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
1				5					10					15	
Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
		20						25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50					55					60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
				85					90					95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
			100					105					110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120					125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
	130					135					140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145					150					155				160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165						170					175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
			180					185					190		
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195					200					205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315  
 nacgcgtccc tcatcgatac cgagccccggg atgggaaaaac ggggtgtatcg cgttgaggcc  
 60  
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<210> 2316

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2316  
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 35 40 45  
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr  
 50 55 60  
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp  
 65 70 75 80  
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp  
 85 90 95  
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly  
 100 105 110  
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe  
 115 120 125  
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro  
 130 135 140  
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln  
 145 150 155 160  
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 165 170 175  
 Trp Arg Thr Ile Thr Gly  
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<210> 2317  
 <211> 496  
 <212> DNA  
 <213> Homo sapiens

<400> 2317  
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 360  
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<210> 2318  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 2318  
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser  
 1 5 10 15  
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp  
 20 25 30  
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe  
 35 40 45  
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala  
 50 55 60  
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser  
 65 70 75 80  
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser  
 85 90 95  
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro  
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<210> 2319  
 <211> 1748  
 <212> DNA  
 <213> Homo sapiens

<400> 2319  
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120  
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180  
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900  
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgtcaa  
960  
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga  
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1200  
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1260  
agtactgaga taatgaaaag accaaagtac tgcagcagtg acagcagtta tgatagtagc  
1320  
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1380  
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1440  
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1620  
atgcctgctc taccaactct caagtgagtg agtctttgag gcaactgaaa acaaaagaac  
1680

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1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

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Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
		20					25					30			
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
	35					40					45				
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50				55					60					
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70					75					80	
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
			85					90						95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
		100						105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
	115					120						125			
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130				135						140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145				150					155						160
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
			165					170						175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
		180						185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
	195					200						205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210					215					220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235					240
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245					250						255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
		260						265					270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
	275					280						285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305					310					315					320
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325					330					335		
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

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          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
          355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
          370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
          500          505          510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
          515          520          525
Leu Pro Pro Thr
          530

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&lt;210&gt; 2321

&lt;211&gt; 433

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2321

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120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga
240
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300
cagggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
360
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
420
cagaggtgga gtg
433

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&lt;210&gt; 2322

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1             5             10             15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
      20             25             30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
      35             40             45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
      50             55             60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65             70             75             80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
      85             90             95
Thr His Ile Asp Thr Ser Thr Gln Leu
      100             105

```

&lt;210&gt; 2323

&lt;211&gt; 532

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2323

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tcctccactg tgcaccccct tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
180
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240
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480
gctcgggtga cttggccatc cccatccccg gccagggccc ggagggcggc cg
532

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&lt;210&gt; 2324

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1             5             10             15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
      20             25             30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
      35             40             45
Pro Arg Thr

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50

<210> 2325  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

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 120  
 ccccgcaagg gccgcattat tcccgagacc gatgctgatg tgggtggtgtg ggacccagaa  
 180  
 gccacaaaga ccatctcagc cagcacgcag gtccagggag gagacttcaa cctgtatgag  
 240  
 aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcgct cgtgtatgag  
 300  
 aacggcgctct tcatgtgcgc cgagggcacc ggcaagttct gtccctgag gtccttccca  
 360  
 gacactgtct acaagaagct ggtccagaga gagaagactt taaagggttag aggagtggcc  
 420  
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 459

<210> 2326  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 2326  
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 Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn  
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 Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro  
 35 40 45  
 Gly Ala Asp Ala Asp Val Val Trp Asp Pro Glu Ala Thr Lys Thr  
 50 55 60  
 Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu  
 65 70 75 80  
 Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg  
 85 90 95  
 Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys  
 100 105 110  
 Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val  
 115 120 125  
 Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr  
 130 135 140  
 Leu Gly Asp Val Ala Val Val Val His  
 145 150

<210> 2327  
 <211> 599

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2327

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 120  
 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct  
 180  
 gactttctcg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc  
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 360  
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 420  
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 540  
 gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgctgcga ggccgctgc  
 599

&lt;210&gt; 2328

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
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Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
		35					40					45			
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
	50				55						60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65				70					75					80	
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120					125			
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
	130					135					140				
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145				150					155					160	
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165					170					175		
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

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Cys Phe Cys Cys Glu Ala Ala  
195

185

190

<210> 2329  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2329  
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180  
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240  
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300  
acggtgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag  
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392

<210> 2330  
<211> 90  
<212> PRT  
<213> Homo sapiens

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20 25 30  
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu  
35 40 45  
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp  
50 55 60  
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln  
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Asn Leu Arg Leu His Ala Ala Arg Lys Asp  
85 90

<210> 2331  
<211> 2813  
<212> DNA  
<213> Homo sapiens

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120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg  
180  
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240  
gggattcagt ttcccttgga cccaaacaca tcccgcgata tcagcattgt gttcactcca  
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360  
tttcgcttca ctctcaatgt gactctccct catcacctgt tgccttcttg tgcagacgtg  
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480  
tcctgttgg gtgtgatttt aatagccttc caacaagcac agtacattct catggaattc  
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600  
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660  
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720  
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780  
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840  
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1320  
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1380  
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1440  
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1620  
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1680  
gccagagag aggcagggtta ctaccagaag cctgagaaga aatgtgtgga caagttctgc  
1740

tccgattcca gctctgaactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc  
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 1920  
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 1980  
 tacgcagagc cttcctgtcc cagccttccct gccggggccca caggtgttga agaagataaa  
 2040  
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta  
 2100  
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 2160  
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 2220  
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 2280  
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 2580  
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 2813

&lt;210&gt; 2332

&lt;211&gt; 789

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5					10					15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35					40					45			
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
		50				55					60				
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65					70					75				80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

1705

515				520				525							
Asp	Ser	Val	Ser	Gln	Asn	Asp	Phe	Pro	Ser	Glu	Ala	Pro	Ile	Ser	Leu
530				535				540							
Asn	Leu	Ser	His	Asn	Ile	Cys	Asn	Pro	Met	Thr	Val	Asn	Ser	Leu	Pro
545				550				555				560			
Gln	Tyr	Ala	Glu	Pro	Ser	Cys	Pro	Ser	Leu	Pro	Ala	Gly	Pro	Thr	Gly
565				570				575							
Val	Glu	Glu	Asp	Lys	Gly	Leu	Tyr	Ser	Pro	Gly	Asp	Leu	Trp	Pro	Thr
580				585				590							
Pro	Pro	Val	Cys	Val	Thr	Ser	Ser	Leu	Asn	Cys	Thr	Leu	Glu	Asn	Gly
595				600				605							
Val	Pro	Cys	Val	Ile	Gln	Glu	Ser	Ala	Pro	Val	His	Asn	Ser	Phe	Ile
610				615				620							
Asp	Trp	Ser	Ala	Thr	Cys	Glu	Gly	Gln	Phe	Ser	Ser	Ala	Tyr	Cys	Pro
625				630				635				640			
Leu	Glu	Leu	Asn	Asp	Tyr	Asn	Ala	Phe	Pro	Glu	Glu	Asn	Met	Asn	Tyr
645				650				655							
Ala	Asn	Gly	Phe	Pro	Cys	Pro	Ala	Asp	Val	Gln	Thr	Asp	Phe	Ile	Asp
660				665				670							
His	Asn	Ser	Gln	Ser	Thr	Trp	Asn	Thr	Pro	Pro	Asn	Met	Pro	Ala	Ala
675				680				685							
Trp	Gly	His	Ala	Ser	Phe	Ile	Ser	Ser	Pro	Pro	Tyr	Leu	Thr	Ser	Thr
690				695				700							
Arg	Ser	Leu	Ser	Pro	Met	Ser	Gly	Leu	Phe	Gly	Ser	Ile	Trp	Ala	Pro
705				710				715				720			
Gln	Ser	Asp	Val	Tyr	Glu	Asn	Cys	Cys	Pro	Ile	Asn	Pro	Thr	Thr	Glu
725				730				735							
His	Ser	Thr	His	Met	Glu	Asn	Gln	Ala	Val	Val	Cys	Lys	Glu	Tyr	Tyr
740				745				750							
Pro	Gly	Phe	Asn	Pro	Phe	Arg	Ala	Tyr	Met	Asn	Leu	Asp	Ile	Trp	Thr
755				760				765							
Thr	Thr	Ala	Asn	Arg	Asn	Ala	Asn	Phe	Pro	Leu	Ser	Arg	Asp	Ser	Ser
770				775				780							
Tyr	Cys	Gly	Asn	Val											
785															

&lt;210&gt; 2333

&lt;211&gt; 501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc  
60

gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtgc  
120

gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta  
180

aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca  
240

tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg  
300

acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat  
360



gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atgggtgtgac gaagcttaaa  
 420  
 aaaataaaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt  
 480  
 gcgattgccca aagatgtacg c  
 501

<210> 2334  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2334  
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala  
 1 5 10 15  
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr  
 20 25 30  
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly  
 35 40 45  
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val  
 50 55 60  
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala  
 65 70 75 80  
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp  
 85 90 95  
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val  
 100 105 110  
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala  
 115 120 125  
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg  
 130 135 140

<210> 2335  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2335  
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 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac  
 120  
 cccatgggcc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc  
 180  
 accgcctgc agttggaaca ggaggctgag agctttaggg agctggaggg ccctgcccag  
 240  
 ggcagccac ccagccctgg tgaggaggcc ctggtcccta ctttccact ggccaagccc  
 300  
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttcaca  
 360  
 gcatcttcat cagcatcggg cactagt  
 387

<210> 2336

<211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2336

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Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1             5             10             15
Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
             20             25             30
Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
             35             40             45
Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
             50             55             60
Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
65             70             75             80
Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
             85             90             95
Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
             100             105

```

<210> 2337  
 <211> 359  
 <212> DNA  
 <213> Homo sapiens

<400> 2337

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ngagaagagg aggagtcate ggcagggggcc ggcattctcca ggctctgcca agccgctggg
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accatgtgca gctcaagaat ggctccggc ccatcggcct cggggcaggg gaagggcagc
120
ttctctgcac cagcttcctt gctgggctcc agggccca ca ggctgaggcc gggggcccag
180
gggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga
240
cctgcgggat cctcgtcctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
300
ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct
359

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<210> 2338  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<400> 2338

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Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1             5             10             15
Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
             20             25             30
Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
             35             40             45
Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
             50             55             60
Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

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<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
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<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
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BNSDOCID: <WO 0058473A2 | >

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 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaagggag aagaggagag  
 120  
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca  
 180  
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag  
 240  
 agtcctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat  
 300  
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt  
 360  
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n  
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1				5					10					15	
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
			35				40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50				55				60						
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75					80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

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 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc  
 120  
 agccctgata agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg  
 180  
 cctctgcccc ctgcgtccaa tcctcctggg accgtgcatt cagccccaaa ccgggggcta  
 240  
 ggcaggcggc cttcggacct caccatcagt attaalcaga tgggctcacc gggcatgggg  
 300

cacttgaagt cgcccaccct tagccagggtg cactcacccc tggtcacctc gccctctgcc  
 360  
 aacctcaagt caccacagac tccctcacag atgggtgccct tgccttctgc caaccgcca  
 420  
 ggacctctca agtcgcccc ggtcctcggc tcttccctca gtgtccgttc acccactggc  
 480  
 tcgcccagca ggtcgaagtc tcttccatg gcggtgcctt ct  
 522

<210> 2344  
 <211> 174  
 <212> PRT  
 <213> Homo sapiens

<400> 2344  
 Gly Pro Gln Lys Met Leu Met Pro Ser Gln Phe Pro Asn Gln Gly Gln  
 1 5 10 15  
 Gln Gly Phe Ser Gly Gly Gln Gly Pro Tyr Gln Ala Met Ser Gln Asp  
 20 25 30  
 Met Gly Asn Thr Gln Asp Met Phe Ser Pro Asp Gln Ser Ser Met Pro  
 35 40 45  
 Met Ser Asn Val Gly Thr Thr Arg Leu Ser His Met Pro Leu Pro Pro  
 50 55 60  
 Ala Ser Asn Pro Pro Gly Thr Val His Ser Ala Pro Asn Arg Gly Leu  
 65 70 75 80  
 Gly Arg Arg Pro Ser Asp Leu Thr Ile Ser Ile Asn Gln Met Gly Ser  
 85 90 95  
 Pro Gly Met Gly His Leu Lys Ser Pro Thr Leu Ser Gln Val His Ser  
 100 105 110  
 Pro Leu Val Thr Ser Pro Ser Ala Asn Leu Lys Ser Pro Gln Thr Pro  
 115 120 125  
 Ser Gln Met Val Pro Leu Pro Ser Ala Asn Pro Pro Gly Pro Leu Lys  
 130 135 140  
 Ser Pro Gln Val Leu Gly Ser Ser Leu Ser Val Arg Ser Pro Thr Gly  
 145 150 155 160  
 Ser Pro Ser Arg Leu Lys Ser Pro Ser Met Ala Val Pro Ser  
 165 170

<210> 2345  
 <211> 561  
 <212> DNA  
 <213> Homo sapiens

<400> 2345  
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 60  
 ggcctccacc agcccgcgtc caggccgcct gggctcgacg cgctggacag gcgcccggcg  
 120  
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag  
 180  
 gcctgcgcgc ccgcctcgcc tgcgtgtcc gagtccttgg cgctgtcgga cgtgagtga  
 240  
 tcgagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat  
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac  
 360  
 acacccatgg acatcgaca gctcccccat ctgccggaga aaacttccga atcctcggag  
 420  
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac  
 480  
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc  
 540  
 ggaagaagtc gggcaacgcg t  
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa	Ile	Ser	Val	Leu	Ile	Leu	Ser	Thr	Glu	Ala	Leu	Gly	Gly	Glu	Asp
1				5					10					15	
Ser	Ser	Arg	Gly	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu
			20					25					30		
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
		35					40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
	50					55					60				
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65					70					75				80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90						95	
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
		100						105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
		115					120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
	130					135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150					155					160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
			165					170					175		
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

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 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac  
 120  
 gtcgggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggg ggcgggggac  
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc  
 240  
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc  
 300  
 cagctgttgc aggaagccgg tttgccccaa ggtgtgctga acgtggtgca tggtgacaag  
 360  
 accgcggtgg acgcg  
 375

<210> 2348  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 2348  
 Ile Ser Glu Glu His Gly Arg Thr Leu Glu Asp Ala Ala Gly Glu Leu  
 1 5 10 15  
 Lys Arg Gly Ile Glu Asn Val Glu Tyr Ala Cys Ala Ala Pro Glu Val  
 20 25 30  
 Leu Lys Gly Glu Tyr Ser Arg Asn Val Gly Pro Asn Ile Asp Ala Trp  
 35 40 45  
 Ser Asp Phe Gln Pro Leu Gly Val Val Ala Gly Ile Thr Pro Phe Asn  
 50 55 60  
 Phe Pro Ala Met Val Pro Leu Trp Met Tyr Pro Leu Ala Ile Val Cys  
 65 70 75 80  
 Gly Asn Cys Phe Ile Leu Lys Pro Ser Glu Arg Asp Pro Ser Ser Thr  
 85 90 95  
 Leu Leu Ile Ala Gln Leu Leu Gln Glu Ala Gly Leu Pro Lys Gly Val  
 100 105 110  
 Leu Asn Val Val His Gly Asp Lys Thr Ala Val Asp Ala  
 115 120 125

<210> 2349  
 <211> 417  
 <212> DNA  
 <213> Homo sapiens

<400> 2349  
 nnnaaaaaaaaa aaaaaacacaa tatttaaatgg acgcggttta ttcagcaggt  
 60  
 gctgacaaag tttttggtgt cccaggagat ttaaatctag cctttttaga tgatattatt  
 120  
 gcacataatc atattaaatg gattggtaat acaaataaac ttaatgcaag ttatgccgct  
 180  
 gacggatatg cacgtattaa tggcatcggg gcaatggtaa caacatttgg agtgggtgaa  
 240  
 ttaagtgtg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc  
 300  
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttcccttggc  
 360  
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct  
 417

<210> 2350

<211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 2350

Xaa	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Thr	Gln	Tyr	Leu	Met	Asp	Ala	Val
1				5						10					15	
Tyr	Ser	Ala	Gly	Ala	Asp	Lys	Val	Phe	Gly	Val	Pro	Gly	Asp	Phe	Asn	
			20					25					30			
Leu	Ala	Phe	Leu	Asp	Asp	Ile	Ile	Ala	His	Asn	His	Ile	Lys	Trp	Ile	
		35				40					45					
Gly	Asn	Thr	Asn	Glu	Leu	Asn	Ala	Ser	Tyr	Ala	Ala	Asp	Gly	Tyr	Ala	
	50					55				60						
Arg	Ile	Asn	Gly	Ile	Gly	Ala	Met	Val	Thr	Thr	Phe	Gly	Val	Gly	Glu	
65				70					75					80		
Leu	Ser	Ala	Val	Asn	Gly	Ile	Ala	Gly	Ser	Tyr	Ala	Glu	Arg	Val	Pro	
			85					90					95			
Val	Ile	Ala	Ile	Thr	Gly	Ala	Pro	Thr	Arg	Ala	Val	Glu	Gln	Glu	Gly	
		100						105					110			
Lys	Tyr	Val	His	His	Ser	Leu	Gly	Glu	Gly	Thr	Phe	Asp	Asp	Tyr	Arg	
	115					120						125				
Lys	Met	Phe	Glu	Pro	Ile	Thr	Thr	Ala	Gln	Ala						
	130					135										

<210> 2351  
 <211> 696  
 <212> DNA  
 <213> Homo sapiens

<400> 2351

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<211> 1000

<212> PRT

<213> Homo sapiens

&lt;400&gt; 2356

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Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
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Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
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Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
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1721

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Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser



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 <213> Homo sapiens

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<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

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<212> DNA

<213> Homo sapiens

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360

ggccctgct gtggtgctag gtcccagat gagagatcac ggcatgaag atcagcccc  
 420  
 aaggcagccc ctccnttcc agcctgggct ctggcgtggt ctaggtgctc acttccatgg  
 480  
 ctggcctgct cacagagccc tacctcagcc tgtggtgaag gcacctgctc ggccctgggtg  
 540  
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgagggacg  
 600  
 aaacacgggtg gccctgctcc tagtgccctgt gcacgccacg ctccacacct gccatctgcc  
 660  
 cttccaccac ctgctcccc aggggctccg cctcgtgact cacgctcagg caagtctccg  
 720  
 ggcgcaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aacctagagg  
 780  
 gtggatctcc ggaggtcatc gatgtggaca gactgccaca gcccttcacg cgt  
 833

<210> 2364  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 2364  
 Xaa Thr Pro Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln  
 1 5 10 15  
 Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr  
 20 25 30  
 Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu  
 35 40 45  
 Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val  
 50 55 60  
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys  
 65 70 75 80  
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln  
 85 90 95  
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala  
 100 105 110  
 Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser  
 115 120 125  
 Pro Asp Glu Arg Ser Arg Ser  
 130 135

<210> 2365  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2365  
 accggtgccc agctcccacg gctcgtccag acctacgttg agaaacttcg acgagacagt  
 60  
 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa  
 120  
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg  
 180

atggtgatgg gactcgggtt ccaaccacgg ttccatgtga cccagacagt tctggttggc  
 240  
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgcgct  
 300  
 cacgggggctg cggtcggccc acacctctc ctcaccgagg taggcaaata ccgcttcacc  
 360  
 atagagctca aggtgattga gaccacacgg cgccatgacg cgcgtcagga aatcaagagt  
 420  
 ggaacgcgt  
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met	Ala	Arg	Cys	Gly	Leu	Asn	His	Leu	Glu	Leu	Tyr	Gly	Glu	Ala	Gly
1				5					10					15	
Phe	Ala	Tyr	Arg	Gly	Glu	Glu	Glu	Val	Trp	Ala	Asp	Arg	Ser	Pro	Val
			20					25					30		
Thr	Ala	Glu	Asp	Met	Arg	Trp	Leu	Asp	Gly	Leu	Cys	Arg	Gly	Arg	Gly
			35				40					45			
Ile	Glu	Leu	Gly	Ala	Asn	Gln	Asn	Cys	Leu	Gly	His	Met	Glu	Pro	Trp
	50				55						60				
Leu	Glu	Thr	Glu	Ser	His	His	His	Arg	Cys	Glu	Asn	Pro	Asp	Gly	Val
65					70				75					80	
Asp	Leu	Pro	Trp	Gly	Val	His	Ala	Arg	Ala	Ser	Thr	Leu	Ala	Pro	Val
			85					90						95	
Pro	Glu	Asn	Leu	Asp	Phe	Val	Gln	Arg	Leu	Leu	Gly	Glu	Leu	Thr	Glu
			100					105						110	
Thr	Val	Ser	Ser	Lys	Phe	Leu	Asn	Val	Gly	Leu	Asp	Glu	Pro	Trp	Glu
			115				120							125	
Leu	Gly	Thr	Gly												
			130												

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

ngtgcacggg agaagacgtg cgcgcagttc ggcggaacct atccgggttc ggccggcagt  
 60  
 ggggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggcgtcga tttcgtcaaa  
 120  
 tacgatcggg gctccgggtga ctccgcgcac gacgaccagg tcgcctcgtt caccgcgatg  
 180  
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaaccc caacagcgaa  
 240  
 tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaaccat gacacgtacc  
 300  
 accaacgaca tctcgccggt gtggaccact cggccggcgg gtgccgatgc gacaccggca  
 360

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt  
 420  
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgcgggaac gcgt  
 474

<210> 2368  
 <211> 158  
 <212> PRT  
 <213> Homo sapiens

<400> 2368  
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly  
 1 5 10 15  
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala  
 20 25 30  
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser  
 35 40 45  
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile  
 50 55 60  
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu  
 65 70 75 80  
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr  
 85 90 95  
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro  
 100 105 110  
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp  
 115 120 125  
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala  
 130 135 140  
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg  
 145 150 155

<210> 2369  
 <211> 408  
 <212> DNA  
 <213> Homo sapiens

<400> 2369  
 ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca  
 60  
 aaggggagcg ccctgggacc taaccagag ccccatctca ccttcccccg ttctttcaaa  
 120  
 gtgcctcccc caacccagc caggacttcg tccatcccag ttcaggaagc acaagaggct  
 180  
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct  
 240  
 tccacatccg ccccgccctc caggtctacc cagacagggc ccccgagcnc agactgcct  
 300  
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca  
 360  
 gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct  
 408

<210> 2370

<211> 136  
 <212> PRT  
 <213> Homo sapiens

<400> 2370  
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser  
 1 5 10 15  
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His  
 20 25 30  
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg  
 35 40 45  
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys  
 50 55 60  
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala  
 65 70 75 80  
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser  
 85 90 95  
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg  
 100 105 110  
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro  
 115 120 125  
 Pro Ala Pro Pro Leu Pro Pro Pro  
 130 135

<210> 2371  
 <211> 327  
 <212> DNA  
 <213> Homo sapiens

<400> 2371  
 gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg  
 60  
 agagggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga  
 120  
 ggcaggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcagggcaca  
 180  
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaaca  
 240  
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt  
 300  
 caggcgggcc aaggttttca tgcagcn  
 327

<210> 2372  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 2372  
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu  
 1 5 10 15  
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile  
 20 25 30  
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
      65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

```

<210> 2373  
 <211> 591  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2373
gaattctgac attcaggaag tcaattgcag aagggttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agcttttcac
180
agaaaatggt accaaagtgt agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgcttttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

<210> 2374  
 <211> 167  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2374
Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1      5      10      15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
20     25     30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
35     40     45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
50     55     60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65     70     75     80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

				85						90					95				
Pro	Asp	Ser	Cys	Glu	Met	Asn	Pro	Asn	Thr	Gln	Met	Thr	Gly	Asn	Gln				
			100					105					110						
Leu	Asn	Leu	Lys	Asn	Met	Glu	Thr	Pro	Ser	Thr	Ser	Asn	Val	Ser	Gly				
		115					120					125							
Arg	Val	Leu	Asp	Asn	Ser	Phe	Cys	Ser	Gly	Gln	Glu	Ser	Ser	Thr	Lys				
	130					135					140								
Gly	Met	Pro	Ala	Lys	Ser	Asp	Ser	Ser	Cys	Ser	Met	Glu	Val	Leu	Ala				
145					150					155					160				
Thr	Cys	Leu	Ser	Leu	Trp	Lys													
				165															

&lt;210&gt; 2375

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2375

```

ntggccatgt cgttgctcag cagcggcacc ctggacagtt accttgagcg tcacaaacaa
60
ctggacgcga tgcgcatgct gcacttcttc gccctcgacg aagaaaaccc cgccagcatc
120
tataactgcc tgcgcgccgc gcggggcaat gccacgcggg tacgcggggcg gatcaccgcc
180
gacatgtggg aaaacctcaa cgccacctgg ctggaaatgc gcagcatcgc cgccggggggc
240
ctggcccggc atggcatcag ccacttctgt gactgggtca agcagcggtc gcacctgttc
300
cgccggggcaa cctcggggcac catcatgcgc aacgacgctt accgggttat tcgcctgggc
360
acgtttgtcg agcgcgcgga caacaccttg cgcctgctgg atgcgcgcta cgaaatgttt
420
ggtgaggagt cggaagaggt cagcgacctg tcggcacgcg ggtattacca gtggagcgcc
480
ctgctgcggg ccttgctcgc attcgaggcg tataccgaac tgtaccccaa cgcgt
535

```

&lt;210&gt; 2376

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2376

Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu				
1				5				10					15						
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu				
			20					25					30						
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg				
	35					40					45								
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu				
	50				55					60									
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly				
65				70				75						80					
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg				



```

<400> 2378
Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
 1          5          10          15
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
          20          25          30
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
      50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
      65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

&lt;210&gt; 2379

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgcctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaaag ca
342

```

&lt;210&gt; 2380

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
  1              5              10              15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
      20              25              30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
      35              40              45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
      50              55              60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
      65              70              75              80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
      85              90              95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
      100              105              110
Ser

```

&lt;210&gt; 2381

&lt;211&gt; 434

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2381

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc  
60  
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg  
120  
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat  
180  
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca  
240  
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccaggcca  
300  
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc  
360  
ccggagctga ccgcctcgtg aagaggctgt caggctcatgt acccatcgct gtggtgtcga  
420  
attccccgac gcgt  
434

&lt;210&gt; 2382

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2382

Met	Val	Thr	Met	Tyr	Pro	Pro	Gln	Gln	Val	Asp	Ala	Val	Leu	Phe	Asp
1				5					10					15	
Met	Asp	Gly	Thr	Leu	Leu	Asn	Thr	Leu	Pro	Ala	Trp	Cys	Val	Ala	Ser
			20					25					30		
Glu	His	Leu	Trp	Gly	Thr	Ser	Leu	Ala	Asp	Ala	Asp	Ser	Ala	Lys	Val
		35					40					45			
Asp	Gly	Gly	Thr	Val	Asp	Asp	Val	Val	Glu	Leu	Tyr	Leu	Arg	Asp	His
	50					55					60				
Pro	Gln	Ala	Asp	Pro	Gln	Ala	Thr	Ile	Glu	Arg	Phe	Met	Asp	Ile	Leu
65					70					75				80	
Asp	Ala	Asn	Leu	Ala	Gly	His	Thr	Glu	Pro	Met	Pro	Gly	Ala	Asp	Arg
			85						90				95		
Leu	Val	Lys	Arg	Leu	Ser	Gly	His	Val	Pro	Ile	Ala	Val	Val	Ser	Asn
			100					105					110		
Ser	Pro	Thr	Arg												
			115												

&lt;210&gt; 2383

&lt;211&gt; 393

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2383

acgcgtgcgt tcagatgagc gccggacgaa actcctcggg cgcttcggca ggcattggatt  
60  
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg  
120

cagaaaacgc ccactctccc ttccccaggc gccggccgctc gagtcgtcta cgcaacgcac  
 180  
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc  
 240  
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt  
 300  
 cttttctgat gccaccacc ttgttacata ttctgccatg caaaacacct tgtgattttt  
 360  
 ggcggagtgc aacatggtat gtgtatgcc a ctg  
 393

<210> 2384  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 2384  
 Met Leu His Ser Ala Lys Asn His Lys Val Phe Cys Met Ala Glu Tyr  
 1 5 10 15  
 Val Thr Arg Trp Val Ala Ser Arg Lys Thr Arg Cys Ile Leu Cys Asp  
 20 25 30  
 Asn Pro His Ser Val His Leu Ile Phe Arg Ala Asp Ile Glu His Ala  
 35 40 45  
 Glu Pro Ile Arg Val Arg Lys Trp Gly Tyr Glu Lys Val Thr Tyr Val  
 50 55 60  
 Asp Val Arg Cys Val Asp Asp Ser Thr Ala Gly Ala Trp Gly Arg Glu  
 65 70 75 80  
 Ser Gly Arg Phe Leu Pro His Pro Arg Arg Ile Ala Thr Arg Arg Arg  
 85 90 95  
 Ser Cys Ser Lys Ala Arg Ala Asp Met Asn Pro Cys Leu Pro Lys Arg  
 100 105 110  
 Pro Arg Ser Phe Val Arg Arg Ser Ser Glu Arg Thr Arg  
 115 120 125

<210> 2385  
 <211> 347  
 <212> DNA  
 <213> Homo sapiens

<400> 2385  
 acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggtat  
 60  
 gcactgtgct gtggactctt gttgtggggt cctaggtctg cccagcattt tggggttcac  
 120  
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggt  
 180  
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc  
 240  
 caagaccct caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc  
 300  
 caagggcctt tacgcactac tctctggggc cactgtctg cactctt  
 347

<210> 2386

<211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 2386  
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu  
 1 5 10 15  
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly  
 20 25 30  
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val  
 35 40 45  
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met  
 50 55 60  
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe  
 65 70 75 80  
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly  
 85 90 95  
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu  
 100 105

<210> 2387  
 <211> 715  
 <212> DNA  
 <213> Homo sapiens

<400> 2387  
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg  
 60  
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc  
 120  
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg cccccggccc  
 180  
 ctgtccgcag cccacagcca caccgcgcac cctacaccct ccttgcgctt ctgctgggga  
 240  
 gctaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt  
 300  
 ggggtgtgag tgccgtgtgtg ggggtagggg cagggtgtccg cttgtgcgca tatgggcatg  
 360  
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca  
 420  
 cgtgtgtggg cccaaataga tgcggtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg  
 480  
 tgtgcctgtg tgccgtatt tgagtgttta caggaatgtg ggtggtaggt acccgatatgt  
 540  
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta  
 600  
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt  
 660  
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag  
 715

<210> 2388  
 <211> 58  
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
          20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
          35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
          50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgctg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggatgatgat cgataaacacg
240
ccgatcgact acctcgactt cgcctcgccg gtgtccggcc tgggttcgaa gatggggctc
300
gatccacacgc acaaatggcc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
          20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
          35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
          50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
          65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
          85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
          100           105           110

```

<210> 2391

<211> 388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2391

```

gtcgactaac ctgcgtacag cgcgccacct acgttttagtc gcgaagcgtg tcggctccat
60
gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcaa
120
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttccact
180
gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
300
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttcccatcgc
360
agtgcctgac cgcaccaaag ccctgcct
388

```

&lt;210&gt; 2392

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2392

```

Met Asn Lys Val Leu Pro Asp Pro Pro Ile Asp Pro Ala Lys Asp Arg
1           5           10           15
Val Ala Phe Asn Arg Ala Ile Asp His Tyr Leu Pro Thr Gln Gly Phe
20           25           30
His Cys Val Asn Glu Asp Leu Ser Phe Glu Asp Ala Leu Leu Tyr Thr
35           40           45
Ala Ser Leu Leu Asp Ser Ala Ser Ala Thr Ala Leu Asp Cys Gly Glu
50           55           60
Leu Leu Gln Ser Pro Glu Arg Ala Lys Ile Leu Ala Val Trp His Leu
65           70           75           80
Leu Glu Ile Ala Lys Thr Thr Val Asp Arg Phe Pro Ile Glu Cys Leu
85           90           95
Thr Ala Pro Lys Pro Cys
100

```

&lt;210&gt; 2393

&lt;211&gt; 411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2393

```

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgtc tgagtccggc
60
atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
120
tgcgccccgt tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
180
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
240

```

atgacggcta tgccgcttgt tgttgcgcg gaggggtgtat ctaagaagga agccctcgaa  
 300  
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctg atgcggataa taagctcacc  
 360  
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g  
 411

<210> 2394  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2394  
 Asn Leu Ser Thr Glu Asp Gln Ala Glu Gln Val Glu Ile Val Lys Arg  
 1 5 10 15  
 Ser Glu Ser Gly Met Val Thr Asp Pro Ile Thr Ala Arg Pro Asp Met  
 20 25 30  
 Thr Ile Gly Glu Val Asp Ala Leu Cys Ala Arg Phe Arg Ile Ser Gly  
 35 40 45  
 Leu Pro Val Val Asp Glu Asp Gly Thr Leu Met Gly Ile Cys Thr Thr  
 50 55 60  
 Arg Asp Met Arg Phe Glu Pro Asp Phe Asp Arg Lys Val Ser Glu Val  
 65 70 75 80  
 Met Thr Ala Met Pro Leu Val Val Ala Arg Glu Gly Val Ser Lys Lys  
 85 90 95  
 Glu Ala Leu Glu Leu Leu Ser Ala Asn Lys Val Glu Lys Leu Pro Ile  
 100 105 110  
 Val Asp Ala Asp Asn Lys Leu Thr Gly Leu Ile Thr Val Lys Asp Phe  
 115 120 125  
 Val Lys Thr Glu Gln Tyr Pro Asn Ala  
 130 135

<210> 2395  
 <211> 362  
 <212> DNA  
 <213> Homo sapiens

<400> 2395  
 aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac tttagtcata  
 60  
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac  
 120  
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca  
 180  
 atatcatcat actttccaaa tatttttgat tttttagaca tcaactgaag ttgtgacct  
 240  
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt  
 300  
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc  
 360  
 gt  
 362

<210> 2396



<211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 2396  
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro  
 1 5 10 15  
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His  
 20 25 30  
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys  
 35 40 45  
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu  
 50 55 60  
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val  
 65 70 75 80  
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His  
 85 90 95  
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala  
 100 105 110  
 Asn Ser Ser Glu Ser  
 115

<210> 2397  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2397  
 nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc  
 60  
 tagtgtacta ctggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg  
 120  
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca  
 180  
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat  
 240  
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag  
 300  
 ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt  
 360  
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc  
 420  
 taacccaaaa gcttcttcat gagaatcac  
 449

<210> 2398  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 2398  
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro  
 1 5 10 15  
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

	20		25		30										
Gln	Thr	Ser	Lys	Thr	Lys	Ala	Arg	Glu	Thr	Arg	Thr	Leu	Thr	Trp	Val
	35				40				45						
Thr	Ile	Pro	His	Ala	Gly	Ile	Val	Ile	Ser	Asp	Thr	His	Leu	Asp	Thr
	50				55				60						
Pro	Arg	Ser	Ile	Asn	Thr	Thr	Ser	Thr	Ile	Gly	Met				
65					70				75						

&lt;210&gt; 2399

&lt;211&gt; 344

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2399

```

acgcggtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttgtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaaccc tttgctggtc cggccaggct tggagggggt cgaaaaccta caacgccaca
240
aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc
344

```

&lt;210&gt; 2400

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2400

Met	Leu	His	Glu	Thr	Gly	His	Ala	Leu	His	Tyr	Gln	Ala	Ala	Gly	Lys
1				5					10					15	
His	Asn	Leu	Tyr	Phe	Glu	Arg	Val	Ala	Pro	Val	Glu	Ile	Met	Glu	Phe
			20					25					30		
Val	Ala	Tyr	Cys	Leu	Gln	Phe	Leu	Thr	Ile	Glu	Arg	Leu	Ala	Met	Ser
			35				40					45			
Gly	Glu	Leu	Ser	Gly	Lys	Glu	Gln	Glu	Leu	Val	Lys	Pro	Phe	Ala	Gly
	50				55				60						
Pro	Ala	Arg	Leu	Gly	Gly	Val	Arg	Lys	Pro	Thr	Thr	Pro	Gln	Asn	Gly
65					70				75					80	
Ser	Ser	Thr	Gly	Phe	Ile	Asn	Ser	Leu	Lys	Ser	Arg	Gln	Val	Lys	Asn
			85					90					95		
Ser	Ile	Pro	Tyr	Gly	Leu	Arg	Cys	Asp	Thr	Arg	Ser	Gly	Trp	Ile	Gly
			100					105					110		

&lt;210&gt; 2401

&lt;211&gt; 479

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2401

nntaccgagg taaaactcga tagcctcggt gtcaccgacc agatgcgctc tgggcgctgc  
 60  
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat  
 120  
 gactttgagt tttcctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc  
 180  
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg  
 240  
 gctacttccc tcgagctcac aggcgacgac ggcggctggg ggatcattttt caccaacctc  
 300  
 gtggacaagt acggcgcagt cccggccgag gtcatgcctg aggtgcactc gtccggccac  
 360  
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg  
 420  
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt  
 479

<210> 2402  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 2402  
 Xaa Thr Glu Val Lys Leu Asp Ser Leu Gly Val Thr Asp Gln Met Arg  
 1 5 10 15  
 Ser Gly Arg Cys Trp Met Phe Ala Ala Leu Asn Val Phe Arg His Arg  
 20 25 30  
 Ala Ala Lys Glu Leu Asn Ile Asp Asp Phe Glu Phe Ser Phe Thr Tyr  
 35 40 45  
 Leu Gln Tyr Phe Asp Lys Leu Glu Arg Ala Asn Phe Ala Leu Asn Gln  
 50 55 60  
 Leu Leu Asp Leu Thr Glu Asp Gly Thr Asp Trp Asp Asp Arg Asp Val  
 65 70 75 80  
 Ala Thr Ser Leu Glu Leu Thr Gly Asp Asp Gly Gly Trp Trp Ser Phe  
 85 90 95  
 Phe Thr Asn Leu Val Asp Lys Tyr Gly Ala Val Pro Ala Glu Val Met  
 100 105 110  
 Pro Glu Val His Ser Ser Gly His Thr Asp Gln Met Asn Arg Asp Ile  
 115 120 125  
 Ala Thr Ile Ile Arg Arg Ala Ala His Arg Ala Val Glu Gly Glu Gly  
 130 135 140  
 Asp Arg Gly Gly Ile Val Lys Gln Ala Arg Pro Asp Ile Gln Arg  
 145 150 155

<210> 2403  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2403  
 ntcataaacg gcgataaccc gctggactcg tctgcgggttc acccggaagc ctaccgcgtg  
 60  
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg  
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc  
 180  
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc  
 240  
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa  
 300  
 ggcgtggtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac  
 360  
 ggtttggtgc acatctctgc actttcg  
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10					15		
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
			20					25					30		
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
			35				40					45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50					55					60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65					70					75				80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
			100					105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc  
 60  
 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt  
 120  
 ctactccac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag  
 180  
 cttcatctc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca  
 240  
 gcaatcctgg taccaacgaa tggetcacca ccaccaccc caatgcccag accgcagacc  
 300  
 tgcattcctc ccatctcaca gcccacaatc caaacgtta ttattctac ctccatcct  
 360

actcctcacg aattttcttcc accgtagact ctggttaatt ggactgactg aagcccaggg  
 420  
 gtcagtttct gtcttaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc  
 480  
 ctgctatagg ctgctgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg  
 540  
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg  
 600  
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg  
 660  
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc  
 720  
 tctcagttcc cagtgttagc tatggggccc agcacacagg gaacagcagt tcaattaccc  
 780  
 agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gccccttcag  
 840  
 gagaagggga agaacgcgt  
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1				5					10					15	
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20					25					30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35					40				45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55				60					
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70					75				80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85					90					95		
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggg ttatcttcag catggtgatc gcgattgggt tagccgttat ggctgcggtc  
 60

gtattcatcg agcaaggcca gcgacgtatc cgggtgcagt acgccaagcg gatggtgggg  
120  
cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt  
180  
atcccgggtca tctttgcctc gtcgatcctg taccttccgg tgcctctacgc aactttccgg  
240  
ccgcagacgt ccgcggcaaaa gtggatcggg cactacttca cgcgcgggtga ccatccgggtg  
300  
tac  
303

<210> 2408

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2408

Xaa	Ala	Trp	Phe	Ile	Phe	Ser	Met	Val	Ile	Ala	Ile	Gly	Leu	Ala	Val
1				5					10					15	
Met	Ala	Ala	Val	Val	Phe	Ile	Glu	Gln	Gly	Gln	Arg	Arg	Ile	Pro	Val
			20					25					30		
Gln	Tyr	Ala	Lys	Arg	Met	Val	Gly	Arg	Arg	Met	Phe	Gly	Gly	Ser	Thr
		35					40				45				
Thr	Tyr	Ile	Pro	Leu	Lys	Val	Asn	Gln	Ser	Gly	Val	Ile	Pro	Val	Ile
	50				55						60				
Phe	Ala	Ser	Ser	Ile	Leu	Tyr	Leu	Pro	Val	Leu	Tyr	Ala	Thr	Phe	Arg
65				70					75					80	
Pro	Gln	Thr	Ser	Ala	Ala	Lys	Trp	Ile	Gly	His	Tyr	Phe	Thr	Arg	Gly
			85						90					95	
Asp	His	Pro	Val	Tyr											
			100												

<210> 2409

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2409

ccatggtttc aagcccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca  
60  
cctcccggcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt  
120  
cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc  
180  
tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg  
240  
ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga  
300  
gggacatgag tgtcagtggt gg  
322

<210> 2410

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
          35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
          50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
          100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgccccctggg gctcattcta
60
gggtctgcgg cagacaggga gacagaggga gctgtgagag ccctgaggct gagtggcttt
120
ctggggaagc accatcccta gggacctcg cgttcggta gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtggta gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggt tgtggctggc aagaggggtg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
          35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
          50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
				85					90					95	
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
			100					105					110		
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115					120								

<210> 2413  
 <211> 784  
 <212> DNA  
 <213> Homo sapiens

<400> 2413  
 cccgggagag ttgggcgggg caggggtgtt catggcatac tcgggattgt gtcatttggt  
 60  
 gtggctggat ttaggggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct  
 120  
 taggtctact gaggaattgg gggtcttcct gaagagcatg gagcccttgg aggacctcca  
 180  
 cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacaggt  
 240  
 ggctgaggtg agctcttccc atggagtgca tccttctga tcagcctgag gagagcaggg  
 300  
 ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc  
 360  
 accaggtggc aggccctggag attgcatgga ggccccgcc cccccaacca attctttgat  
 420  
 aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct  
 480  
 ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag  
 540  
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<210> 2414  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2414  
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 Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser



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360					
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420					
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 2040  
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 2160  
 aaaa  
 2164

&lt;210&gt; 2416

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5					10					15	
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
			20					25				30			
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35				40					45				
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50	55	60
Ala Glu Val Cys	Ala Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met	
65	70	75
Ile Arg Pro Ser	Val Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser	80
	85	90
Leu Gln Ser Glu	Pro Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly	95
	100	105
His Ile Phe Ser	Ala Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr	110
	115	120
Ala Val Ala Ala	Gly Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro	125
	130	135
Ala Met Val His	Ala Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys	140
145	150	155
Thr Leu Ala Thr	Trp Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu	160
	165	170
Lys Cys Val Val	Ser Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val	175
	180	185
Ala Ala Leu Cys	Ser Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val	190
	195	200
Leu Leu Pro Glu	Arg	205
210		

&lt;210&gt; 2417

&lt;211&gt; 615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2417

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aagctgattt gattttcata ttgatacttc aatagtttaag tgaaggacta gttattgctc

120

cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt

180

acgttttttc acaactgtga tccacgccac agttgcaaata atcaacata gaaaaattaa

240

ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga

300

gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggagaa

360

aaatccacaa atccttttgc tttcaaactat tatgatgcta atcaagtaat tttaggtaaa

420

actatggctg aacattttacg cttaacggtg tggtattggc ataccttttg ctggaatggg

480

aatgatatgt ttgggctagg ttctttggaa cgaagttggc agaaaaattc aaatttgctt

540

gctggcgcag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct

600

tattattggtt ttcatt

615

&lt;210&gt; 2418

&lt;211&gt; 101

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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120
gctccttcct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
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aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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1751

gaatgcgcag actgcaagtc aaagggctcct cgatgggcaa gtgtgaatct aggtatcttt  
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 240  
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac  
 300  
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 gagaatttga t  
 371

<210> 2424  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<400> 2424  
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 1 5 10 15  
 Lys Ile Leu Glu Gly Leu Leu Arg His Pro Glu Asn Arg Glu Cys Ala  
 20 25 30  
 Asp Cys Lys Ser Lys Gly Pro Arg Trp Ala Ser Val Asn Leu Gly Ile  
 35 40 45  
 Phe Ile Cys Met Thr Cys Ser Gly Ile His Arg Ser Leu Gly Val His  
 50 55 60  
 Ile Ser Lys Val Arg Ser Ala Thr Leu Asp Thr Trp Leu Pro Glu Gln  
 65 70 75 80  
 Val Ala Phe Ile Gln Ser Met Gly Asn Glu Lys Ala Asn Ser Tyr Trp  
 85 90 95  
 Glu Ala Glu Leu Pro Pro Asn Tyr Asp Arg Val Gly Ile Glu Asn Leu  
 100 105 110

<210> 2425  
 <211> 411  
 <212> DNA  
 <213> Homo sapiens

<400> 2425  
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 120  
 acctcccggc ctgcacgggg gtctgggtttc accgcccacg cccagcccga ggaacgcccc  
 180  
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 240  
 aaccagaaac tcgccgacgt cacgccgcgc ccgcgtccga gccaggccgc cttcagcctc  
 300  
 gacggcctgc acgcctgac cgggggagag ccgctgctga tgcgtcgctt gatcgacgag  
 360  
 ctgctgagca gttgccaggc ggcccgcgag gcactgctcg gactgcccac c  
 411

<210> 2426

<211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2426  
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val  
 1 5 10 15  
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu  
 20 25 30  
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe  
 35 40 45  
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu  
 50 55 60  
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu  
 65 70 75 80  
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala  
 85 90 95  
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu  
 100 105 110  
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala  
 115 120 125  
 Arg Glu Ala Leu Leu Gly Leu Pro Ile  
 130 135

<210> 2427  
 <211> 293  
 <212> DNA  
 <213> Homo sapiens

<400> 2427  
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 120  
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat  
 180  
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac  
 240  
 aactcatgac ctgcatacctt aatatccagt gacttcatct ccccttcacg cgt  
 293

<210> 2428  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 2428  
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 1 5 10 15  
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala  
 20 25 30  
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys  
 35 40 45  
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60  
 Asn Val Pro Leu Ser Gly Lys Val  
 65 70

<210> 2429  
 <211> 428  
 <212> DNA  
 <213> Homo sapiens

<400> 2429  
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 120  
 gatgtcctgc tcaatgggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg  
 180  
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 240  
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 420  
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 428

<210> 2430  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 2430  
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 Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser  
 20 25 30  
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu  
 35 40 45  
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala  
 50 55 60  
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu  
 65 70 75 80  
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala  
 85 90 95  
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg  
 100 105 110  
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg  
 115 120 125  
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala  
 130 135 140

<210> 2431  
 <211> 409



<212> DNA

<213> Homo sapiens

<400> 2431

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120
aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact
180
ttattatctg agggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgttaaaaga gctgggtgct actgctactc agactcaaca ctgcgtgcat
300
attaatgcga aagaagttaa gaactatact gcttcttatg aattagttag aagtatgcgt
360
gcttcaattt tggcattagg tccattgggt gctcgggttc gtgaagctt
409

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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
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Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
 20             25             30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
 35             40             45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
 50             55             60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
 65             70             75             80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
 85             90             95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
100             105

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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccaggttta ccctgaagt tcaagtgcaa
240

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tgccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac  
 300  
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 360  
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 420  
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 480  
 tgtgactgcc gtgttccaaa cacacccttt gcttttacia aaacccaaac tgggagggtt  
 540  
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggaggttaat  
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 caaatgggcc atcactcaat gcagggaggg gaggggtgtg ctcaggacaa cgcgt  
 655

<210> 2434  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 2434  
 Met Ala His Leu Ile Asn Leu Leu Ser His Ser Ala Leu Ser Leu Leu  
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 Cys Ser Glu Thr Val Pro Phe Ala Lys Pro Pro Ser Leu Gly Phe Cys  
 20 25 30  
 Lys Ser Lys Gly Cys Val Trp Asn Thr Ala Val Thr Glu Lys Val Leu  
 35 40 45  
 Phe Ala Gln Ser Ala Arg Pro Leu Leu Leu Ser Leu Met Ser Pro Asp  
 50 55 60  
 Trp Ala Phe Ile Val Pro Cys Thr Glu Ala Ser Leu Ser Pro Arg Ser  
 65 70 75 80  
 Cys Leu Phe Gly Arg Gly Ser Thr Asn Gly Ser Thr Leu Pro Pro Thr  
 85 90 95  
 Pro Thr Ala Arg Pro Ala Gly Pro Val Val Gln Leu Glu Lys Ala Arg  
 100 105 110  
 Leu Leu Ser Ser Pro Ala Leu Cys Cys Ala Gly Ala Leu His Leu Asn  
 115 120 125  
 Phe Arg Gly Lys Pro Gly Lys Arg Leu  
 130 135

<210> 2435  
 <211> 401  
 <212> DNA  
 <213> Homo sapiens

<400> 2435  
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 aacgtgctgc gtacctccat ggaactgggc ngcaatgccc cattcattgt ctttgaggac  
 120  
 gcagatattg accaagcggg ccagggtgcg atgggcgcca agatgcgcaa tatcggcgag  
 180  
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 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gtatggacga aggtattacc  
 300  
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 gcagaaaagg gcgctacat ctccaccggc ggtaagcgcg c  
 401

<210> 2436  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2436  
 Lys Leu Ser Phe Thr Gly Ser Thr Pro Val Gly Arg Thr Leu Leu Lys  
 1 5 10 15  
 Xaa Ala Ala Asp Asn Val Leu Arg Thr Ser Met Glu Leu Gly Xaa Asn  
 20 25 30  
 Ala Pro Phe Ile Val Phe Glu Asp Ala Asp Ile Asp Gln Ala Val Gln  
 35 40 45  
 Gly Ala Met Gly Ala Lys Met Arg Asn Ile Gly Glu Ala Cys Thr Ala  
 50 55 60  
 Ala Asn Arg Phe Leu Val His Glu Ser Val Ala Glu Glu Phe Ser Glu  
 65 70 75 80  
 Lys Leu Val Ala Glu Phe Glu Lys Leu Asn Leu Gly Asn Gly Met Asp  
 85 90 95  
 Glu Gly Ile Thr Cys Gly Pro Leu Val Glu Ser Lys Ala Leu Glu Ser  
 100 105 110  
 Ile Ala Ala Leu Val Asp Asp Ala Glu Lys Gly Ala Thr Ile Ser  
 115 120 125  
 Thr Gly Gly Lys Arg  
 130

<210> 2437  
 <211> 449  
 <212> DNA  
 <213> Homo sapiens

<400> 2437  
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 120  
 atgggtatgta tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc  
 180  
 tcttaaattcc caccacttac tgtgacacag tgaccggtcc ctgcagcgga ctggatagtt  
 240  
 gtatcagagt cctggacgga aacagatggc actcaaaaagg tggcgcgcag ttcagagaaa  
 300  
 tgcctatgta cggatttggg ccaatgctc agcctgacct caggggacct cgggggtctg  
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 agttccagtc atttcatttt atcgtctgtg  
 449

<210> 2438  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens

<400> 2438  
 Met Val Glu His Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr  
 1 5 10 15  
 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg  
 20 25 30  
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg  
 35 40 45  
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg  
 50 55 60  
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro  
 65 70 75 80  
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe  
 85 90 95  
 Ile Ala Val

<210> 2439  
 <211> 4425  
 <212> DNA  
 <213> Homo sapiens

<400> 2439  
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 aaaaagacac tgcacaagtt ctgtggcccc tcccctgtgg tcttcagtga tgtgaactcc  
 120  
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 <213> Homo sapiens

<400> 2443  
 nccgtgcgcg ctatcttgcg tcgtacgccg tccagggaag atgaaaaaat gctacaaacg  
 60  
 gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa  
 120  
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag  
 180  
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac  
 240  
 cgtgccattg atacccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac  
 300  
 cccgtctata tccgcacggt ttatggtgtc gggatatctgc ccggaggctt tgatgaagct  
 360  
 t  
 361

<210> 2444  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2444

```

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1           5           10           15
Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
          20           25           30
Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
          35           40           45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
          50           55           60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65           70           75           80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
          85           90           95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
          100          105          110
Leu Pro Gly Gly Phe Asp Glu Ala
          115          120

```

&lt;210&gt; 2445

&lt;211&gt; 403

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2445

```

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac
60
ctcccccttca tttgatatacc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
120
aggaagcatg tttatcctgt tcagattact gcttctgcca ggctgctgct gctgttgggt
180
tctgcacatt tgctctttat taagcaaagt tcagagctgg gtgctggcaa gggaatcccc
240
tgtatttaca caggtaaacc tgagagccag agggccccc accatcctgg ctgcgaggga
300
caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
360
aataaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
403

```

&lt;210&gt; 2446

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2446

```

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1           5           10           15
Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Leu Gly Ser Ala His Leu
          20           25           30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
          35           40           45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
          50           55           60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

65                                      70                                      75                                      80  
 Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe  
                                     85                                      90                                      95  
 Thr Gln Glu Pro Glu Lys  
                                     100

<210> 2447  
 <211> 744  
 <212> DNA  
 <213> Homo sapiens

<400> 2447  
 nacgcgtcga ggtttgccag tcacgggttg cgggtggggc aggtactact caccgtcaat  
 60  
 gacctggtgc ggcccacttc gtaccgcaat gcctggtcaa ccctcgacac tttgctgggg  
 120  
 ttgggcgtcg tgccgatcgt caacgagaac gacacggtcg ccaccggaga aattcggttt  
 180  
 ggcgataatg atcggcttgc tgccctggta gccgagctgg tgcgcgctca agccctcatt  
 240  
 ctgctctctg acgttgacgc cttgtacacc gcccatccgg attcaccgga tgctcgtcgc  
 300  
 gtggagggtt tggaggacat cgatgcattg gatgtcgata ccataaaagc tggttcgggg  
 360  
 gtgggaaccg gcggcatgac cacgaaactt gaagccgccc gaatggccac ctgtgccggg  
 420  
 gtaccggttg tactcgcagc ggcggtggat gccccggacg ttctggctgg tgccccctg  
 480  
 ggtacctact tccgcccgtt ggcgacgcga cggccccgac ggttgctgtg gttggccgac  
 540  
 gctgccaccc cgcagggaca gatcgtcatc gacgacggag ctgtcgaagc tttgacacag  
 600  
 cgtcattcct cgttgttggc ggtgggtgtg actcgggtac acggggattt ccaagcaggc  
 660  
 gaccagtga cgatcctggc ctccgacggt cgagttgttg gtcgcggtat cgcccagttc  
 720  
 tcccatgatg aggtgcgcgt catg  
 744

<210> 2448  
 <211> 248  
 <212> PRT  
 <213> Homo sapiens

<400> 2448  
 Xaa Ala Ser Arg Phe Ala Ser His Gly Leu Arg Val Gly Gln Val Leu  
 1                                      5                                      10                                      15  
 Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp  
                                     20                                      25                                      30  
 Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn  
                                     35                                      40                                      45  
 Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp  
                                     50                                      55                                      60  
 Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

```

65      70      75      80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85      90      95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100      105      110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115      120      125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130      135      140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
145      150      155      160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165      170      175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180      185      190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195      200      205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210      215      220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
225      230      235      240
Ser His Asp Glu Val Arg Val Met
      245

```

&lt;210&gt; 2449

&lt;211&gt; 296

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgtctt cccctctctc ctgggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttcccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc ccnccc
296

```

&lt;210&gt; 2450

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
 1      5      10      15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20      25      30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35      40      45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451  
 <211> 589  
 <212> DNA  
 <213> Homo sapiens

<400> 2451  
 nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac  
 60  
 tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag  
 120  
 gagaaggctg tgggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctggtcccat  
 180acgcattggt cattacgggt ccgcctggat caggtcggtc gaatgctgcg 240  
 aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt  
 300  
 cgaaccngcc tgtcaggcgc ccatactgac gtcaccctcg tgcgtactga ggcgctgtct  
 360  
 attggcgctg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc  
 420  
 cggggcgctc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct  
 480  
 gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc  
 540  
 cctactccag aggacgtcat cgtcacgatc aggtcgagat gtcggcgcc  
 589

<210> 2452  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 2452  
 Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro  
 1 5 10 15  
 Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala  
 20 25 30  
 Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala  
 35 40 45  
 Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu  
 50 55 60  
 Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe  
 65 70 75 80  
 Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala  
 85 90 95  
 Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg  
 100 105 110  
 Thr Glu Ala Leu Ser Ile Gly Val Asp  
 115 120



<210> 2453  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 2453  
 nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc acactcaggg  
 60  
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac  
 120  
 acaggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct  
 180  
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat  
 240  
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca  
 300  
 gaggcatttg tgtgcgtggg catttgcagc atgactcaga acggagtatg ggggtggcgcg  
 360  
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaaccc tcccaacctg cccatcctgg  
 420  
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa  
 480  
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg  
 540  
 gaccggccac gacgcagtgc ccacagggac caccaggtga catgggtgct gcactaggca  
 600  
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggaccgcact tagtcatgtc  
 660  
 agcccccgga agaaggagca ccaggctcca gatct  
 695

<210> 2454  
 <211> 166  
 <212> PRT  
 <213> Homo sapiens

<400> 2454  
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro  
 1 5 10 15  
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu  
 20 25 30  
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His  
 35 40 45  
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr  
 50 55 60  
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr  
 65 70 75 80  
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln  
 85 90 95  
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys  
 100 105 110  
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys  
 115 120 125  
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130                      135                      140  
 Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln  
 145                      150                      155                      160  
 Val Thr Trp Val Leu His  
                          165

<210> 2455  
 <211> 378  
 <212> DNA  
 <213> Homo sapiens

<400> 2455  
 acgcgtcggc agaagcgtca gctgaccgtc ggagccgata tgtccccagg cgtcgtcagc  
 60  
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc  
 120  
 aaagaactcg ttctgggcca atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc  
 180  
 gcgctgtttg caggcgtggt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg  
 240  
 ctgccgccgt tcatcaacgt gatgtcgctg gcggtggcac cgctgggcgg gttgatcggc  
 300  
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc  
 360  
 ggcacgtcgc ccaagaat  
 378

<210> 2456  
 <211> 126  
 <212> PRT  
 <213> Homo sapiens

<400> 2456  
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro  
 1                      5                      10                      15  
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile  
                          20                      25                      30  
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser  
                          35                      40                      45  
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala  
                          50                      55                      60  
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Tyr Arg Arg Leu  
 65                      70                      75                      80  
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly  
                          85                      90                      95  
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val  
                          100                      105                      110  
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn  
                          115                      120                      125

<210> 2457  
 <211> 754  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag  
 60  
 atgagcgaat gtgacatctt gcacactctg cgatggtctt ctcggtccg gatcagctcc  
 120  
 tatgtcaact ggataaagga tcaccttatc aaacagggaa tgaaggctga gcatgctagc  
 180  
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata  
 240  
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc  
 300  
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta  
 360  
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc  
 420  
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct  
 480  
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagaggga acaactgaga  
 540  
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt  
 600  
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg  
 660  
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca  
 720  
 atgcctttgc caatgacacc atcccttcac gcgt  
 754

&lt;210&gt; 2458

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
		35					40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
	50					55					60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65					70					75				80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
				85					90					95	
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
			100					105					110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
		115					120					125			
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
	130					135					140				
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

&lt;210&gt; 2459

&lt;211&gt; 382

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2459

```

accggtgcac agatcgttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctgggtcttg agggcggcgt cgtggctgag aaggctcgctg gtctgccccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgacccggcc
180
aagggtgaccc gttcggctct gcagaacgcc gcgtccatcg cggccctggt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

```

&lt;210&gt; 2460

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2460

```

Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Val Val Ala Glu Lys Val
          20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
          35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
          50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
          85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
          100          105          110

```

<210> 2461  
 <211> 558  
 <212> DNA  
 <213> Homo sapiens

<400> 2461  
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc  
 60  
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca  
 120  
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacaccaat tgcgcgacgg  
 180  
 ctggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac  
 240  
 ggctggaaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc  
 300  
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctggtg  
 360  
 gtcgcccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg  
 420  
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctggtg  
 480  
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac  
 540  
 tacatcatcc tgccgcga  
 558

<210> 2462  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 2462  
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu  
 1 5 10 15  
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr  
 20 25 30  
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn  
 35 40 45  
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val  
 50 55 60  
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp  
 65 70 75 80  
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg  
 85 90 95  
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly  
 100 105 110  
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val  
 115 120 125  
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg  
 130 135 140  
 Leu Leu Ala Asp  
 145

<210> 2463  
<211> 333  
<212> DNA  
<213> Homo sapiens

<400> 2463  
cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag  
60  
ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg  
120  
ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg  
180  
ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat  
240  
accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcggtagg tttgagcggg  
300  
ttggtcgcgg cgatcaaggg cggttgggtc gac  
333

<210> 2464  
<211> 106  
<212> PRT  
<213> Homo sapiens

<400> 2464  
Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe  
1 5 10 15  
Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro  
20 25 30  
Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala  
35 40 45  
Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp  
50 55 60  
Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala  
65 70 75 80  
Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu  
85 90 95  
Val Ala Ala Ile Lys Gly Gly Trp Val Asp  
100 105

<210> 2465  
<211> 434  
<212> DNA  
<213> Homo sapiens

<400> 2465  
nntcatgagg acatttcct catatttggt ggtggtaaata cctcctggg acacggggaa  
60  
atgaccagag gctggcggcc cacctggcag gaacagatgc cagctctgct gcagccatcg  
120  
ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggt  
180  
gggtgatgga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc  
240

actggctgct gggctatctc gggcgccggc tgctgggcta tctcaggcgc tggctgctgc  
300  
tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt  
360  
gctgggtgcc agctgctgcc taccttgacac tgggctctgg gcactcactg cactcgggct  
420  
tttccatctc cgac  
434

<210> 2466  
<211> 82  
<212> PRT  
<213> Homo sapiens

<400> 2466  
Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile  
1 5 10 15  
Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile  
20 25 30  
Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp  
35 40 45  
Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu  
50 55 60  
Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro  
65 70 75 80  
Ser Pro

<210> 2467  
<211> 306  
<212> DNA  
<213> Homo sapiens

<400> 2467  
atggactcca cgggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag  
60  
gtcggcgggc caaggaagaa gtcgggtgtcg aggtccgtga aggccggtct ccagttcccc  
120  
gtcggcgcca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc  
180  
gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc  
240  
ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg  
300  
atccgg  
306

<210> 2468  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 2468  
Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

1           5           10           15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
20           25           30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
35           40           45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
50           55           60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
65           70           75           80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
85           90           95
Val Leu Leu Ala Ile Arg
100

```

<210> 2469  
 <211> 489  
 <212> DNA  
 <213> Homo sapiens

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<400> 2469
gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagaggggtca gggtggaaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470  
 <211> 115  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
1           5           10           15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
20           25           30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
35           40           45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
50           55           60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```



```

65              70              75              80
Lys Gln Glu His Ser Leu Val Leu Ser Asp His Phe Arg Trp Lys Gly
              85              90              95
Ser Gly Asn Val Gly Glu Asn Thr Phe Trp Cys Arg Tyr Ile Glu Ser
              100              105              110
Ala His Leu
              115

```

<210> 2471  
 <211> 779  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2471
tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc
60
ctcacatggg ggcccttgac ttctttcaca gtgaggacct ctgcttcatg aggctcataa
120
gaagaggagc taaggactat tttgtcatgg gggcgccaat ccaactgcac ttctactata
180
attctctcat ttctgaggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt ccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggg caaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gattttctaa agtaccact ttcagctccc cgctgcaat gaccatgcat
420
gccacactca gaacattgct tctgtccaca ggaagtcta aggtcccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctggtgggta aaatgagaac
540
gtcatcccca gggcctggaa tggatttgtt gtatcctccc cagccttctt caacaccttg
600
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
660
agttgggggc ataccttctt tcacccggag aatgacttga acttggcctt cacctaaaac
720
cagataggtg agttgcctca gctggctatt gaagaaccag tcacagcctt ggttctggc
779

```

<210> 2472  
 <211> 181  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2472
Met Thr Phe Ser Phe Tyr Pro Thr Glu Leu Ser Leu Trp Ile Gln Ile
  1              5              10              15
Phe Gln Phe Phe Lys Gly Leu Tyr Val Met Gly Thr Leu Asp Phe Pro
              20              25              30
Val Asp Arg Ser Asn Val Leu Ser Val Ala Cys Met Val Ile Ala Gly
              35              40              45
Gly Glu Leu Lys Val Gly Thr Leu Glu Asn Pro Leu Glu Lys Glu Gln

```

50	55	60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg		
65	70	75
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys		80
	85	90
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly		95
	100	105
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val		110
	115	120
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Tyr Glu		125
	130	135
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His		140
	145	150
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His		155
	160	165
Val Thr Glu Asp Gly	170	175
	180	

&lt;210&gt; 2473

&lt;211&gt; 698

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2473

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga  
 60  
 cgcatctgct ccaaggccca cagctggcag ccgnnggcat ccagaacca taccggggca  
 120  
 ccgtggtgtg gatggtacnc tgagaatgtg gacatctctg tgaccctcta cagggaacccc  
 180  
 cacgtggacc agtatgagga caaagagtgg acatttatta ttgaaaatga gtctaagggg  
 240  
 cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc  
 300  
 ntgtccaagt ccncaactgag gctgcggtg aagccaaagt cagtgaagac ggtgcaggct  
 360  
 gagctgagcc tcaactctttc cgggggtgctg ctgcgggagg gccgtgccac ggacgatgac  
 420  
 atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac  
 480  
 ttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc cggggctcga  
 540  
 gteccccagc caggtggggt cacagcctgc tgtggatcga gactgccaag acctggggag  
 600  
 ggaggggttac ccggggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac  
 660  
 tgcccaggca gtcccaacca acccagcagc ctcaattg  
 698

&lt;210&gt; 2474

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2474

```

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1           5           10           15
Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
      20           25           30
Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
      35           40           45
Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
      50           55           60
Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
      65           70           75           80
Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
      85           90           95
Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
      100          105          110
Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
      115          120          125
Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
      130          135          140
Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
      145          150          155          160
Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
      165          170          175
Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
      180          185          190
Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
      195          200          205
Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
      210          215          220
Pro Asn Gln Pro Ser Ser Leu Asn
      225          230

```

&lt;210&gt; 2475

&lt;211&gt; 1251

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2475

```

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
60
agccccctcc tggcctgctg gcagcccatc ctccctgctgg tgctgggctc agtgctgtca
120
ggctcggcca cgggctgccc gccccgctgc gaggctccg cccaggaccg cgctgtgctg
180
tgccaccgca agcgctttgt ggcagtcccc gagggcatcc ccaccgagac gcgcctgctg
240
gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag ctccccgcac
300
ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccg cgccttcaac
360
aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catccccgta
420
ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
480

```

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac  
 540  
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg  
 600  
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc  
 660  
 ctcacgtgcc tgagggtccg gcacctcaac atcaatgcca tccgggacta ctccttcaag  
 720  
 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttggga caccatgaca  
 780  
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc  
 840  
 gctgtgccct acctggccgt ccgccaccta gtctatctcc gcttctctcaa cctctcctac  
 900  
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc  
 960  
 cagctgggtg gcgggcagct ggccgggtgg agccctgcct tccgcggcct caactacctg  
 1020  
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg  
 1080  
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgcga ctgtcggctc  
 1140  
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca  
 1200  
 cgcccgagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a  
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5					10					15	
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
		50				55					60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70					75				80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
				85					90					95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100					105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
		130				135					140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145					150					155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

				165					170					175			
Glu	Val	Gly	Asp	Asn	Asp	Leu	Val	Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser		
			180						185					190			
Gly	Leu	Asn	Ser	Leu	Glu	Gln	Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr		
		195					200					205					
Ser	Ile	Pro	Thr	Glu	Ala	Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu		
	210					215					220						
Arg	Leu	Arg	His	Leu	Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys		
225					230					235					240		
Arg	Leu	Tyr	Arg	Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu		
			245						250					255			
Asp	Thr	Met	Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu		
		260						265					270				
Ser	Ile	Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg		
	275						280					285					
His	Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser		
	290					295					300						
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu	Ile		
305					310					315				320			
Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Gly	Trp	Ser	Pro	Ala	Phe	Arg	Gly		
			325					330					335				
Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn	Gln	Leu	Thr	Thr		
		340						345				350					
Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn	Leu	Glu	Thr	Leu	Ile		
	355						360				365						
Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys	Arg	Leu	Leu	Trp	Val	Phe		
	370					375				380							
Arg	Arg	Arg	Gly	Leu	Gln	Thr	Ser	Thr	Gly	Ser	Ser	Pro	Arg	Ala	Pro		
385					390					395					400		
Arg	Pro	Ser	Leu	Ser	Arg	Gly	Lys	Glu	Phe	Lys	Asp	Phe	Pro	Asp	Val		
			405					410					415				

Leu

&lt;210&gt; 2477

&lt;211&gt; 548

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2477

nagactgcga tcagacgcgc gtgccagct gaaccaggtg cgtgagaagg ctgccttcag  
60  
gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg  
120  
aagtgtgagg agttcccgct cagcctgtca tcagtctccc caggtcttga agcggcggcc  
180  
ctgctcctgg ccgtgaccat ggacctctg gagacccta tcaaggatgg catcctctac  
240  
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca  
300  
ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga  
360  
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg  
420

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc  
480  
ttcctgctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg  
540  
atggggccc  
548

<210> 2478<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 2478  
Leu Glu Thr Pro Ile Lys Asp Gly Ile Leu Tyr Gln Gln His Val Lys  
1 5 10 15  
Phe Gly Lys Lys Cys Trp Arg Lys Val Trp Ala Leu Leu Tyr Ala Gly  
20 25 30  
Gly Pro Ser Gly Val Ala Arg Leu Glu Asn Trp Glu Val Arg Asp Gly  
35 40 45  
Gly Leu Gly Ala Ala Gly Asp Arg Ser Ala Gly Pro Gly Arg Arg Gly  
50 55 60  
Glu Arg Arg Val Ile Arg Leu Ala Asp Cys Val Ser Val Leu Pro Ala  
65 70 75 80  
Asp Gly Glu Ser Cys Pro Arg Asp Thr Gly Ala Phe Leu Leu Thr Thr  
85 90 95  
Thr Glu Arg Ser His Leu Leu Ala Ala Gln His Arg Gln Ala Trp Met  
100 105 110  
Gly

<210> 2479  
<211> 324  
<212> DNA  
<213> Homo sapiens

<400> 2479  
gaattcatgg aggtctatga ggaggatgaa gaatatgctg atgaaaaata tgaaacccat  
60  
ttcggcacga gctggatgga ggagaccgca ggcaccttct cactgaactg gtatcgcagc  
120  
aggtactgga atgacaatga agcagcagaa aggcttgctg tgatgtgggc taaaaccttc  
180  
aaatatgctg cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc  
240  
aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgctac  
300  
tctaactcct ggtatcgtga atat  
324

<210> 2480  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys  
 1 5 10 15  
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr  
 20 25 30  
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala  
 35 40 45  
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser  
 50 55 60  
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly  
 65 70 75 80  
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly  
 85 90 95  
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr  
 100 105

<210> 2481  
 <211> 484  
 <212> DNA  
 <213> Homo sapiens

<400> 2481  
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 gttatgttgg cttaactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca  
 120  
 agccctaaag gcaagcgtat tgaagctcgt ttcctgatc caaccgctaa cccataccta  
 180  
 gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcaccctggc  
 240  
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa  
 300  
 gttgctagca gcttagaaga agcgtttaag tgcttagatc aagaccgtga gttcttgact  
 360  
 caaggtggcg ttttctctga cgacatgatc gatgcttaca tcgctcttaa agcagaagaa  
 420  
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa  
 480  
 gctt  
 484

<210> 2482  
 <211> 159  
 <212> PRT  
 <213> Homo sapiens

<400> 2482  
 Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly  
 1 5 10 15  
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala  
 20 25 30  
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu  
 35 40 45  
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala  
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly  
 65 70 75 80  
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala  
 85 90 95  
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu  
 100 105 110  
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp  
 115 120 125  
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val  
 130 135 140  
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu  
 145 150 155

<210> 2483  
 <211> 477  
 <212> DNA  
 <213> Homo sapiens

<400> 2483  
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 60  
 ctggagaaca ggcagcctct gaggaaacct ctgatccccg atcagccacc ccacgcctg  
 120  
 cgtccccagc cgcttctctc tggecttggt ccccttccc tgtgaaggag agaacagttt  
 180  
 cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccacctga  
 240  
 aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga  
 300  
 cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag  
 360  
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag  
 420  
 gtagaattga aattgagtga gccaacccac cacatccatc tggagccagg aactagt  
 477

<210> 2484  
 <211> 130  
 <212> PRT  
 <213> Homo sapiens

<400> 2484  
 Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn  
 1 5 10 15  
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu  
 20 25 30  
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys  
 35 40 45  
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys  
 50 55 60  
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr  
 65 70 75 80  
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Gly Asp Ala Gly Asp  
 85 90 95



Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser  
                   100                  105                  110  
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg  
                   115                  120                  125  
 Phe Gly  
       130

<210> 2485  
 <211> 608  
 <212> DNA  
 <213> Homo sapiens

<400> 2485  
 accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc  
 60  
 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag  
 120  
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag  
 180  
 ctagctggca ccattctgcg tggcgtgacc cgcaagtcca ttctggaagt tgcccccgac  
 240  
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc  
 300  
 tctggcgagt tcccggaagt ctctgcctgt ggtaccgccg cggttgtcac accgatcggc  
 360  
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccgaaa gaccacgatg  
 420  
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccattggctgg  
 480  
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca  
 540  
 cgatcggggt acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt  
 600  
 gaacgcgt  
 608

<210> 2486  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<400> 2486  
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   1                  5                  10                  15  
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp  
           20                  25                  30  
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met  
           35                  40                  45  
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr  
           50                  55                  60  
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp  
   65                  70                  75                  80  
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu  
                   85                  90                  95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr  
                   100                  105                  110  
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp  
                   115                  120                  125  
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg  
                   130                  135                  140  
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp  
 145                  150                  155                  160  
 Leu Lys Arg Val Cys  
                   165

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

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 120  
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc  
 180  
 cagctggggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagtg  
 240  
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag  
 300  
 accttggtaa ggctgctgga cattgaagag gctgtgcac  
 339

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro  
 1                  5                  10                  15  
 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu  
                   20                  25                  30  
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp  
                   35                  40                  45  
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly  
                   50                  55                  60  
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val  
 65                  70                  75                  80  
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln  
                   85                  90                  95  
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val  
                   100                  105                  110  
 His

<210> 2489

<211> 594  
 <212> DNA  
 <213> Homo sapiens

<400> 2489  
 nacgcgttct tcggactggc gacgatgctg atttctatcc cgacgggggt gaagctattt  
 60  
 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc  
 120  
 ctgggcttca tggtagacctt cgcgatcgga ggcataccg gcgtactgct ggccatcccg  
 180  
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc  
 240  
 atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc  
 300  
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct gggtctggat ctggggcttc  
 360  
 ttgcgtcgct tcatgccgct ctatgcactg ggtttcatgg gcatgaccg ttggttgaac  
 420  
 gcccccccca cccctgagtg ggtcccgtac ctgtacgttg ccatggtcgg tgcactgatg  
 480  
 atcgtgtcg gtatgcctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag  
 540  
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg  
 594

<210> 2490  
 <211> 198  
 <212> PRT  
 <213> Homo sapiens

<400> 2490  
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly  
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 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg  
 20 25 30  
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala  
 35 40 45  
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe  
 50 55 60  
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile  
 65 70 75 80  
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe  
 85 90 95  
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala  
 100 105 110  
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr  
 115 120 125  
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr  
 130 135 140  
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met  
 145 150 155 160  
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val  
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala  
                   180                                  185                                  190  
 His Thr Leu Glu Trp Ser  
                   195

<210> 2491  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

<400> 2491  
 acgcgtcacg caactgtcaa acttgccaat cgcgttgacg atactcgccc ctacctacgc  
 60  
 actacgttgt tgcctggtct attccatgca gtaacgacga atatgtcgcg atctcaggat  
 120  
 gatcttgacg tgttcgaaaag cggaactgta ttccgcgcgc tcaactccggc tgcggcaccg  
 180  
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg  
 240  
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg  
 300  
 gatggagagt cggtaaggc tgactggcga cacgctgtgc tggtcgcccc gaaggctgct  
 360  
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtcccatg gcatcccggg  
 420  
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc  
 480  
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat  
 540  
 gctttggtag cctgcgctcc gagcgggtgg gaggtcatgg ttatttcaag gt  
 592

<210> 2492  
 <211> 197  
 <212> PRT  
 <213> Homo sapiens

<400> 2492  
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg  
   1                                  5                                  10                                  15  
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr  
                   20                                  25                                  30  
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly  
                   35                                  40                                  45  
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val  
                   50                                  55                                  60  
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu  
 65                                  70                                  75                                  80  
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu  
                   85                                  90                                  95  
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala  
                   100                                  105                                  110  
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val  
                   115                                  120                                  125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala  
 130 135 140  
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro  
 145 150 155 160  
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu  
 165 170 175  
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val  
 180 185 190  
 Met Val Ile Ser Arg  
 195

&lt;210&gt; 2493

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2493

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tgggtgccttc aggagcagac  
 60  
 cccacacact atgagccgtc gctgcgtgac gttcggaccg tcgtgtattc gagagtcgcg  
 120  
 ctatcgaact acctcatgct cgaacctcat tcgggtcatca agaccatcga ctcttcctta  
 180  
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg  
 240  
 atccccgtgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc  
 300  
 aagggcgcca ggcggggagc cgaccgctct tctcgggtct acctccagct gacgtcggtg  
 360  
 gaggggcctg gggacttcac tgcctatata actgggacct ttggtcgacc tcagatct  
 418

&lt;210&gt; 2494

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro  
 1 5 10 15  
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg  
 20 25 30  
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu  
 35 40 45  
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser  
 50 55 60  
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val  
 65 70 75 80  
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu  
 85 90 95  
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser  
 100 105 110  
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala  
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile  
130 135

<210> 2495  
<211> 1478  
<212> DNA  
<213> Homo sapiens

<400> 2495  
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60  
agtcctcccg ccaggtcccg cggcccgcac ctgccgcccg cacctgcagc tccgcacctg  
120  
cggccagtgc ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgccgcttg  
180  
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg  
240  
gacgtcaaca ccctgacccg cttcgtcatg gaggagggca ggaaggcccg cggcacgggc  
300  
gagttgacct agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg  
360  
cgcaaggcgg gcatcgcgca cctctatggc attgctgggt ctaccaacgt gacaggtgat  
420  
caagttaaga agctggacgt cctctccaac gacctgggta tgaacatggt aaagtcattc  
480  
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag  
540  
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc  
600  
cttggtgccc ttggaaccat ttttggcatc tatagaaaga aatcaactga tgagccttct  
660  
gagaaggatg ctctgcaacc aggccggaac ctgggtggcag ccggctacgc actgtatggc  
720  
agtgccacca tgctggctct tgccatggac tgtgggggtca actgcttcat gctggacccg  
780  
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc  
840  
tacagcetta acgaggggcta cgccaaggac tttgaccctg ccgtcactga gtacatccag  
900  
aggaagaagt tccccccaga taattcagct ccttatgggg cccggtatgt gggctccatg  
960  
gtggctgatg ttcacgcac tctgggtctac ggagggatat ttctgtacct cgctaacaag  
1020  
aagagcccca atggaaagct gagactgctg tacgaatgca accccatggc ctacgtcatg  
1080  
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca  
1140  
gacattcacc agagggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg  
1200  
aaggtgtatg agaagcactc tgcccagtga gcacctgccc tgccctgcac cgagagaattg  
1260  
cctctacctg gaccttttgt ctacacacagc agtaccctga cctgctgtgc accttacatt  
1320

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<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
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1793

Ala Gln 325 330 335

<210> 2497  
 <211> 399  
 <212> DNA  
 <213> Homo sapiens

<400> 2497  
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 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg  
 120  
 atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag  
 180  
 atggcgaaac gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa  
 240  
 gaccgtctcg tcgcggcccg tggctatggc gcctctgcag aggcagcccc aatcgcgtcg  
 300  
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag  
 360  
 cgtcgtcgcg tcgagctggc gcgcatactc ttttccgga  
 399

<210> 2498  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2498  
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg  
 1 5 10 15  
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp  
 20 25 30  
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp  
 35 40 45  
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly  
 50 55 60  
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu  
 65 70 75 80  
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala  
 85 90 95  
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro  
 100 105 110  
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg  
 115 120 125  
 Ile Leu Phe Ser Gly  
 130

<210> 2499  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 2499

nggccgggcg aagaccggtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa  
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tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg  
120  
tggatcacca tectgcgcaa gcgcgacaac tttcgcaaag ctttcgacga tttccagccc  
180  
gagaagatag cgcgttataa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc  
240  
gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc  
300  
atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac  
348

&lt;210&gt; 2500

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2500

Xaa	Pro	Gly	Glu	Asp	Pro	Phe	Tyr	Met	Ala	Tyr	His	Asp	Thr	Glu	Trp
1				5					10					15	
Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
		20						25					30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
		35					40					45			
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50					55				60					
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
65					70					75				80	
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
			85						90					95	
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
			100					105						110	
Asp	Phe	Val	Asp												
			115												

&lt;210&gt; 2501

&lt;211&gt; 569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2501

gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccca tcaaatacaca  
60  
taatgcccac taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt  
120  
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggatatgg  
180  
ctttcaagag tcaaacaatt ttactgggtgc atcatttcca tttattcttt ctcttttgca  
240  
taataaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag  
300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacctca aaaaaatcct  
 360  
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg  
 420  
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct  
 480  
 aactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataacca  
 540  
 gatgtgaaat gctgaatcat taatcacag  
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1				5					10					15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20					25					30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
		35					40				45				
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
	50					55					60				
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65					70					75				80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85						90					95	
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

gccacgccag ccattctaccc ttctctcgac tcgccaaata agtattcact gaacatgtac  
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 aaggccttgc tacctcagca gtctctacagc ttggcccagc cgctgtattc tccagtctgc  
 120  
 accaatgggg agcgctttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca  
 180  
 tcgtccttgg catcacccat gaggetctcg acaccttcgg cctccccagc catcccgctc  
 240  
 ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct  
 300  
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc  
 360  
 aaggcgggtca ccagtggcct gccggggggac acagctctcc tggtgcccc ctcacgcgt  
 419

<210> 2504

<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2504

Met	Tyr	Lys	Ala	Leu	Leu	Pro	Gln	Gln	Ser	Tyr	Ser	Leu	Ala	Gln	Pro
1				5					10					15	
Leu	Tyr	Ser	Pro	Val	Cys	Thr	Asn	Gly	Glu	Arg	Phe	Leu	Tyr	Leu	Pro
			20					25					30		
Pro	Pro	His	Tyr	Val	Gly	Pro	His	Ile	Pro	Ser	Ser	Leu	Ala	Ser	Pro
		35					40					45			
Met	Arg	Leu	Ser	Thr	Pro	Ser	Ala	Ser	Pro	Ala	Ile	Pro	Pro	Leu	Val
	50					55					60				
His	Cys	Ala	Asp	Lys	Ser	Leu	Pro	Trp	Lys	Met	Gly	Val	Ser	Pro	Gly
65					70					75				80	
Asn	Pro	Val	Asp	Ser	His	Ala	Tyr	Pro	His	Ile	Gln	Asn	Ser	Lys	Gln
				85					90					95	
Pro	Arg	Val	Pro	Ser	Ala	Lys	Ala	Val	Thr	Ser	Gly	Leu	Pro	Gly	Asp
			100					105					110		
Thr	Ala	Leu	Leu	Leu	Pro	Pro	Ser	Arg							
		115					120								

<210> 2505  
<211> 540  
<212> DNA  
<213> Homo sapiens

<400> 2505

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ccgctcgtgt tggtgccgtt ggctcggttc accggcgatc ggcgtctgat gggccaatgg  
120  
acgaatgggc gtgtcatggc cgccatcgcg tggatcgtcg tggcagcagt ctcggctctc  
180  
aacgtgggtc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttctgg  
240  
cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga  
300  
cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag  
360  
tggcgatcct cacgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg  
420  
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<210> 2506  
<211> 72  
<212> PRT  
<213> Homo sapiens

<400> 2506

Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

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	20	25	30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala			
	35	40	45
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu			
	50	55	60
Val Val Glu Thr Val Met Gly Ala			
65	70		

&lt;210&gt; 2507

&lt;211&gt; 922

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2507

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 240  
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 922

&lt;210&gt; 2508

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2508

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Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
 1           5           10           15
Leu Phe Ser Gln His Lys Cys Ala Gln His Arg Pro Phe Thr Cys Phe
 20           25           30
His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35           40           45
Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50           55           60
Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65           70           75           80
Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85           90           95
Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
100           105           110
Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
115           120           125
Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
130           135           140
Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
145           150           155           160
Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
165           170           175
Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
180           185           190
Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
195           200           205
Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
210           215           220
Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
225           230           235           240
Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
245           250           255
Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
260           265           270
Gly Gly Gly Val Arg Glu
275

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&lt;210&gt; 2509

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2509

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gttcatgaac ggggtggagcc cggcaaaaacc gaaactcaac caatccttgg ggatgctgga
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cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
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300

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348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
			20					25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
			35				40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
			50			55					60				
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65					70				75					80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
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Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
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<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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663

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 <211> 221  
 <212> PRT  
 <213> Homo sapiens

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 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr  
 35 40 45  
 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro  
 50 55 60  
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe  
 65 70 75 80  
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala  
 85 90 95  
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln  
 100 105 110  
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg  
 115 120 125  
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile  
 130 135 140  
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile  
 145 150 155 160  
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr  
 165 170 175  
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro  
 180 185 190  
 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly  
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 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp  
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<210> 2513  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

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 240  
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368

<210> 2514  
<211> 93  
<212> PRT  
<213> Homo sapiens

<400> 2514  
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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala  
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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly  
35 40 45  
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His  
50 55 60  
Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg  
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Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp  
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<210> 2515  
<211> 351  
<212> DNA  
<213> Homo sapiens

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120  
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180  
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351

<210> 2516  
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<400> 2516  
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20 25 30  
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn.  
35 40 45  
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala



50		55		60
Gly Gly Gln Thr Met	Gly Gln His Thr Pro Ser	Ala Pro Leu Gln Tyr		
65	70	75	80	
Gln His Ser Arg Pro	Thr His Leu Gly Pro Trp Ser	Pro Gly Asp Leu		
85	90	95		
Thr Arg				

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 <211> 356  
 <212> DNA  
 <213> Homo sapiens

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 356

<210> 2518  
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 <212> PRT  
 <213> Homo sapiens

<400> 2518  
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 20 25 30  
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 35 40 45  
 Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu  
 50 55 60  
 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro  
 65 70 75 80  
 Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg  
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 Pro Ser Ser Thr Gly Gln Thr  
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<210> 2519  
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 <212> DNA  
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<400> 2519

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&lt;210&gt; 2520

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2520

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			20				25						30	Ile
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40				45				
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln
	50					55				60				Ser
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg
65					70				75					80
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg
				85				90						95
Arg	Gly	Ala	Val	Leu	Pro	Arg	Arg	Leu	Thr	Gly				
			100					105						

&lt;210&gt; 2521

&lt;211&gt; 4291

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2521

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 3780  
 agtccagttg atctccctg acaatctgga aggttcattt tgccctcagt gccagccaat  
 3840  
 ccgggagga cctcgaaga ggagaccgag ggtcccagag gaccaatgct acaagccagc  
 3900  
 aaatgctgcc acatctctgc ctgatggggg gtgggggatg gtgggggatg gggactgggc  
 3960  
 caagggatct ggggtgggcat ttttaacttt ggaggccttc catctgtcgg taggccatct  
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 gcattttctt actgttgatg tttctgccc aaaggacaca tttgggcagt gccaccact  
 4080  
 ccttgggccc ctaggatgac ccaactaccc ccataacttt ctgcttccca caggttttca  
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 4200  
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 4260  
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 4291

&lt;210&gt; 2522

&lt;211&gt; 952

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2522

Leu	Ser	Leu	Phe	Arg	Ala	Glu	Ser	Pro	Thr	Thr	Ala	Ser	Pro	Ala	Leu
1				5					10					15	
Gly	Gly	Pro	Ala	Pro	Gly	Cys	Ser	Arg	Arg	Thr	Pro	Pro	Pro	Pro	Met
			20					25					30		
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
			35				40					45			
Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
			50			55					60				
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

65					70					75					80
Gln	Pro	Gly	Val	Leu	Leu	Pro	Val	Trp	Glu	Pro	Asp	Asp	Pro	Ser	Leu
				85					90					95	
Gly	Asp	Lys	Ala	Ala	Arg	Ala	Val	Val	Tyr	Phe	Val	Ala	Met	Val	Tyr
			100					105					110		
Met	Phe	Leu	Gly	Val	Ser	Ile	Ile	Ala	Asp	Arg	Phe	Met	Ala	Ala	Ile
		115					120					125			
Glu	Val	Ile	Thr	Ser	Lys	Glu	Lys	Glu	Ile	Thr	Ile	Thr	Lys	Ala	Asn
	130					135					140				
Gly	Glu	Thr	Ser	Val	Gly	Thr	Val	Arg	Ile	Trp	Asn	Glu	Thr	Val	Ser
145					150					155					160
Asn	Leu	Thr	Leu	Met	Ala	Leu	Gly	Ser	Ser	Ala	Pro	Glu	Ile	Leu	Leu
			165					170						175	
Ser	Val	Ile	Glu	Val	Cys	Gly	His	Asn	Phe	Gln	Ala	Gly	Glu	Leu	Gly
			180					185					190		
Pro	Gly	Thr	Ile	Val	Gly	Ser	Ala	Ala	Phe	Asn	Met	Phe	Val	Val	Ile
		195					200					205			
Ala	Val	Cys	Ile	Tyr	Val	Ile	Pro	Ala	Gly	Glu	Ser	Arg	Lys	Ile	Lys
	210					215					220				
His	Leu	Arg	Val	Phe	Phe	Val	Thr	Ala	Ser	Trp	Ser	Ile	Phe	Ala	Tyr
225					230					235					240
Val	Trp	Leu	Tyr	Leu	Ile	Leu	Ala	Val	Phe	Ser	Pro	Gly	Val	Val	Gln
			245					250						255	
Val	Trp	Glu	Ala	Leu	Leu	Thr	Leu	Val	Phe	Phe	Pro	Val	Cys	Val	Val
		260						265					270		
Phe	Ala	Trp	Met	Ala	Asp	Lys	Arg	Leu	Leu	Phe	Tyr	Lys	Tyr	Val	Tyr
	275						280					285			
Lys	Arg	Tyr	Arg	Thr	Asp	Pro	Arg	Ser	Gly	Ile	Ile	Ile	Gly	Ala	Glu
	290					295					300				
Gly	Asp	Pro	Pro	Lys	Ser	Ile	Glu	Leu	Asp	Gly	Thr	Phe	Val	Gly	Ala
305					310					315					320
Glu	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Leu	Gly	Pro	Gly	Pro	Ala	Glu	Ala
			325						330					335	
Arg	Glu	Leu	Asp	Ala	Ser	Arg	Arg	Glu	Val	Ile	Gln	Ile	Leu	Lys	Asp
			340					345					350		
Leu	Lys	Gln	Lys	His	Pro	Asp	Lys	Asp	Leu	Glu	Gln	Leu	Val	Gly	Ile
	355						360					365			
Ala	Asn	Tyr	Tyr	Ala	Leu	Leu	His	Gln	Gln	Lys	Ser	Arg	Ala	Phe	Tyr
	370						375				380				
Arg	Ile	Gln	Ala	Thr	Arg	Leu	Met	Thr	Gly	Ala	Gly	Asn	Val	Leu	Arg
385					390					395					400
Arg	His	Ala	Ala	Asp	Ala	Ser	Arg	Arg	Ala	Ala	Pro	Ala	Glu	Gly	Ala
			405					410						415	
Gly	Glu	Asp	Glu	Asp	Asp	Gly	Ala	Ser	Arg	Ile	Phe	Phe	Glu	Pro	Ser
		420						425					430		
Leu	Tyr	His	Cys	Leu	Glu	Asn	Cys	Gly	Ser	Val	Leu	Leu	Ser	Val	Thr
	435						440					445			
Cys	Gln	Gly	Gly	Glu	Gly	Asn	Ser	Thr	Phe	Tyr	Val	Asp	Tyr	Arg	Thr
	450					455					460				
Glu	Asp	Gly	Ser	Ala	Lys	Ala	Gly	Ser	Asp	Tyr	Glu	Tyr	Ser	Glu	Gly
465					470					475					480
Thr	Leu	Val	Phe	Lys	Pro	Gly	Glu	Thr	Gln	Lys	Glu	Leu	Arg	Ile	Gly
			485					490						495	
Ile	Ile	Asp	Asp	Asp	Ile	Phe	Glu	Glu	Asp	Glu	His	Phe	Phe	Val	Arg

			500					505					510				
Leu	Leu	Asn	Leu	Arg	Val	Gly	Asp	Ala	Gln	Gly	Met	Phe	Glu	Pro	Asp		
		515					520					525					
Gly	Gly	Gly	Arg	Pro	Lys	Gly	Arg	Leu	Val	Ala	Pro	Leu	Leu	Ala	Thr		
		530				535					540						
Val	Thr	Ile	Leu	Asp	Asp	Asp	His	Ala	Gly	Ile	Phe	Ser	Phe	Gln	Asp		
545					550					555					560		
Arg	Leu	Leu	His	Val	Ser	Glu	Cys	Met	Gly	Thr	Val	Asp	Val	Arg	Val		
				565					570					575			
Val	Arg	Ser	Ser	Gly	Ala	Arg	Gly	Thr	Val	Arg	Leu	Pro	Tyr	Arg	Thr		
			580					585						590			
Val	Asp	Gly	Thr	Ala	Arg	Gly	Gly	Gly	Val	His	Tyr	Glu	Asp	Ala	Cys		
		595				600						605					
Gly	Glu	Leu	Glu	Phe	Gly	Asp	Asp	Glu	Thr	Met	Lys	Thr	Leu	Gln	Val		
		610				615					620						
Lys	Ile	Val	Asp	Asp	Glu	Glu	Tyr	Glu	Lys	Lys	Asp	Asn	Phe	Phe	Ile		
625					630					635					640		
Glu	Leu	Gly	Gln	Pro	Gln	Trp	Leu	Lys	Arg	Gly	Ile	Ser	Ala	Leu	Leu		
				645					650					655			
Leu	Asn	Gln	Gly	Asp	Gly	Asp	Arg	Lys	Leu	Thr	Ala	Glu	Glu	Glu	Glu		
			660					665					670				
Ala	Arg	Arg	Ile	Ala	Glu	Met	Gly	Lys	Pro	Val	Leu	Gly	Glu	Asn	Cys		
			675				680					685					
Arg	Leu	Glu	Val	Ile	Ile	Glu	Glu	Ser	Tyr	Asp	Phe	Lys	Asn	Thr	Val		
			690			695				700							
Asp	Lys	Leu	Ile	Lys	Lys	Thr	Asn	Leu	Ala	Leu	Val	Ile	Gly	Thr	His		
705					710					715					720		
Ser	Trp	Arg	Glu	Gln	Phe	Leu	Glu	Ala	Ile	Thr	Val	Ser	Ala	Gly	Asp		
				725				730						735			
Glu	Glu	Glu	Glu	Glu	Asp	Gly	Ser	Arg	Glu	Glu	Arg	Leu	Pro	Ser	Cys		
			740					745					750				
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe		
		755					760					765					
Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly		
		770				775					780						
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu		
785					790					795					800		
Ala	Ser	His	Phe	Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala		
				805				810						815			
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser		
			820					825					830				
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn		
		835				840						845					
Val	Thr	Gly	Ser	Asn	Ala	Val	Asn	Val	Phe	Leu	Gly	Leu	Gly	Val	Ala		
		850				855					860						
Trp	Ser	Val	Ala	Ala	Val	Tyr	Trp	Ala	Val	Gln	Gly	Arg	Pro	Phe	Glu		
865					870					875					880		
Val	Arg	Thr	Gly	Thr	Leu	Ala	Phe	Ser	Val	Thr	Leu	Phe	Thr	Val	Phe		
				885					890					895			
Ala	Phe	Val	Gly	Ile	Ala	Val	Leu	Leu	Tyr	Arg	Arg	Arg	Pro	His	Ile		
			900				905						910				
Gly	Gly	Glu	Leu	Gly	Gly	Pro	Arg	Gly	Pro	Lys	Leu	Ala	Thr	Thr	Ala		
		915				920						925					
Leu	Phe	Leu	Gly	Leu	Trp	Leu	Leu	Tyr	Ile	Leu	Phe	Ala	Ser	Leu	Glu		

930  
Ala Tyr Cys His Ile Arg Gly Phe  
945 950

940

<210> 2523  
<211> 392  
<212> DNA  
<213> Homo sapiens

<400> 2523  
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ttcagccgaa aaattgttgg tgttgctaca cgctcgacga tgcgtaccga tgcgctgccc  
120  
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattggaaa ccagttaatt  
180  
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gtttagcggaa  
240  
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa  
300  
acagtcaacg gtctctacaa ggcggaactg attcatgccc aagggtccgtg gacgtcggtc  
360  
ggagaagtcg aattggccac cttgcggnnn nn  
392

<210> 2524  
<211> 130  
<212> PRT  
<213> Homo sapiens

<400> 2524  
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe  
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Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser  
20 25 30  
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu  
35 40 45  
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp  
50 55 60  
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu  
65 70 75 80  
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn  
85 90 95  
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His  
100 105 110  
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu  
115 120 125  
Arg Xaa  
130

<210> 2525  
<211> 378  
<212> DNA  
<213> Homo sapiens



&lt;400&gt; 2525

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 60  
 tcccccttga atacgtggtg ctgtcaccgc cgcgggaatc aagaaccgca cgttgcgcaa  
 120  
 atcgtgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa  
 180  
 tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggcttg  
 240  
 gaagtcagcg gtgcgccccgc acgctgcga ttccgggtga agacgcgcga ctaccattca  
 300  
 gaactggttg ccgcaacact cattcgcagc gagaagcccg ccgatttgcc caacacctat  
 360  
 caatacggcg tggaattc  
 378

&lt;210&gt; 2526

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
1			5					10					15		
Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
		20					25					30			
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
	35					40					45				
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
	50					55					60				
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65					70					75				80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
				85					90					95	
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
			100					105						110	

&lt;210&gt; 2527

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2527

ntggtcacct tccgaatggg acggcgggccc aaacccgaga tcatggccag caaagagcag  
 60  
 cagatccaga gagacgacct tggagccagt ccccagagca gcagccagcc agaccacggc  
 120  
 cgcctctccc cccagaagc tcccgcaggg cccaccatct ccacggcctc cgagacctca  
 180  
 gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg  
 240  
 gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcgc catcccccca  
 300

cgcgt  
305

<210> 2528  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2528  
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala  
1 5 10 15  
Ser Lys Glu Gln Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln  
20 25 30  
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro  
35 40 45  
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr  
50 55 60  
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val  
65 70 75 80  
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser  
85 90 95  
Ala Ile Pro Pro Arg  
100

<210> 2529  
<211> 387  
<212> DNA  
<213> Homo sapiens

<400> 2529  
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tgtgtcctcc gtgccccccg agtggcctgc tagcccgtc tcccacacag tctccttgat  
120  
gtgaagtgtc acccggttg ctgcggcgtg tctccgccgt aacacgtgta taccgggtca  
180  
gccatggcgg cggctgctgg gaaggctcct gcgtatggct ttgccatccg ggacccgggc  
240  
tttgctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca  
300  
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360  
ccatgagctc cacagggtcc tgaggga  
387

<210> 2530  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 2530  
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1 5 10 15  
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

	20		25		30										
Ala	Gln	Lys	Pro	Thr	Pro	Ala	Glu	Gln	Ser	Pro	Gly	Pro	Gly	Trp	Gln
	35		40		45										
Ser	His	Thr	Gln	Glu	Pro	Ser	Gln	Gln	Pro	Pro	Pro	Trp	Leu	Ser	Arg
	50		55		60										
Tyr	Thr	Arg	Val	Thr	Ala	Glu	Thr	Arg	Arg	Ser	Lys	Pro	Gly	Asp	Thr
	65		70		75		80								
Ser	His	Gln	Gly	Asp	Cys	Val	Gly	Glu	Arg	Ala	Ser	Arg	Pro	Leu	Gly
		85		90		95									
Gly	His	Gly	Gly	His	Arg	Glu	Arg	Leu	Gln	Trp	Gln	Ser	Arg	Pro	Gly
	100		105		110										
Asp	Arg	Asp	Pro	Pro	Arg	Gly	Asp	Ala							
	115		120												

&lt;210&gt; 2531

&lt;211&gt; 396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2531

tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaaggttga  
60  
gctttccaac cagctgaaga tgacaagact aaaccccaag tcgctgcagc tctgtgtcat  
120  
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc  
180  
agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc  
240  
ctgtaatgcy tcaaatectt taggtctcaa ttctttccct agagagacaa ggagcacagt  
300  
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggctctgc  
360  
tgctccacc cacgtgcagg gaaaggaagg acgcgt  
396

&lt;210&gt; 2532

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2532

Met	Thr	Arg	Leu	Asn	Pro	Lys	Ser	Leu	Gln	Leu	Cys	Val	Ile	Ser	Ser
1			5					10					15		
Ala	Ala	Leu	Glu	Met	Thr	Lys	Ile	Val	Leu	Arg	Gly	Asn	Arg	Pro	Ser
		20					25					30			
Ser	Ser	Val	Lys	Asp	Met	Leu	Ala	Phe	Leu	Phe	Leu	Pro	Asp	Ile	Pro
		35				40					45				
Glu	Ser	Arg	Glu	Leu	Ser	Cys	Asn	Ala	Ser	Asn	Pro	Leu	Gly	Leu	Asn
	50				55				60						
Ser	Phe	Pro	Arg	Glu	Thr	Arg	Ser	Thr	Val	Arg	Ser	Gln	Gly	Pro	Pro
	65			70				75					80		
Cys	Leu	Ala	Arg	Ala	Ser	Leu	Leu	Ser	Arg	Gln	Gly	Pro	Ala	Ala	Ser
		85				90						95			
Thr	His	Val	Gln	Gly	Lys	Glu	Gly	Arg							

100

105

<210> 2533  
 <211> 495  
 <212> DNA  
 <213> Homo sapiens

<400> 2533  
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 gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag  
 120  
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg  
 180  
 gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catgggtggtc  
 240  
 ttcgtgcct atgaggcagt gctgaggctc gcccggggtc tgctcacata gccgggtcccc  
 300  
 acgcccagcg gccacccac cagcagctgc tggaggtcgt agtggctgga ggaggcaagg  
 360  
 ggtagtgtgg ctgggttcgg gacccacacag ggccattgcc caggagaatg aggagcctcc  
 420  
 ctgcagtgtt gtcggccgag gcctgagctc gccctgcccc gctactgacc tcaggctcag  
 480  
 gggcccgcga gccat  
 495

<210> 2534  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2534  
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly  
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 20 25 30  
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His  
 35 40 45  
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys  
 50 55 60  
 Gly Leu Val Leu Asn Cys Arg Ala Phe Pro Val Asn Met Val Val  
 65 70 75 80  
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr  
 85 90 95

<210> 2535  
 <211> 1904  
 <212> DNA  
 <213> Homo sapiens

<400> 2535  
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 60

cgtcggtggt aggctgctac catgagggtt aatcagaaca ccttgctgct ggggaagaag  
120  
gtggtccttg taccctacac ctccggagcat gtgccagca ggtaccacga gtggatgaaa  
180  
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc  
240  
atgcagtgca gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag  
300  
aagtggcagg cccagccagg cggccaccga gagagctgca tgggtgggaga cgtgaacctc  
360  
ttcctcacag atctagaaga cccacacctg ggggagatcg aggtcatgat tgcagagccc  
420  
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg  
480  
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc  
540  
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggaggtg  
600  
accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac  
660  
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg  
720  
ggcagccact ctgtgtgagc aggggtgttg gcccatcac ttcaaagacc agagccctgc  
780  
actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg  
840  
cggggcttgc tgtggcctcc ctccagctag tgggtgtggct gagcagactc cagggccagg  
900  
gccagttccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg  
960  
agggcagggg tccatgggag atgtcgggat gaaggtggga gctggaggtg cagggggacc  
1020  
tggaacatgg atgggagtgg acaggccttt ctcccttagag gccagaggtg ctgccctggc  
1080  
tgggagtga gctccaggca ctaccagctt tcctgatttt ccggttggt ccatgtgaag  
1140  
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgcct  
1200  
gcagaggcag gctggtgtga ccctgggaac ttgacccggg aacaacaggt ggtccagagt  
1260  
gagtgtggcc tggccctca acctagtgtc cgctcctcct tctcctggag ccagtcttga  
1320  
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat  
1380  
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg  
1440  
tcaggccatc agctctgtcc ctctggtgct cccacgtctg ttctcaccc tccatctctg  
1500  
ggagcagctg cacctgactg gccacgcggg ggcagtggag gcacaggctc aggggtggccg  
1560  
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg  
1620  
ggagcactct gactcctaac agtcttcctt gccctgccat catctggggg ggctggctgt  
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcatcttcca  
 1740  
 ggtggggaaa cagtcttaga taagtaaggt gacttgcccta aggcctccca gcacccttga  
 1800  
 tcttgagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat  
 1860  
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact  
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
1				5					10					15	
Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20					25					30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35					40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
		50				55					60				
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65					70				75					80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
		100					105						110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
		115					120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
		130				135					140				
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145					150				155					160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165					170					175		
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
		180					185					190			
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
		195					200					205			

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

acgcgttctc gtaaggacaa gcttgacgcc gaggtgcatg ccggtgaagg cccccccggg  
 60  
 gatgtcatcg tgctgcgggtt ttccggagcc atggcgaagc gtctgcctc agttatcctt  
 120  
 ccgctgctac tgctcgactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac  
 180

ctcgccctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac  
 240  
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac  
 300  
 ctgtgttggg ctgcgaccac cagctggaga gccctagctg cagcagcttt ggatcaacat  
 360  
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg  
 420  
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgcg  
 480  
 cccggcatct ccgcgatcgt catgtcgac  
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70					75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
		115					120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135				140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145					150				155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
				165											

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgcg  
 60  
 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcggtt tctcaacgag  
 120  
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcggtg  
 180

ggggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgccctc  
 240  
 gtagtggcca atatgaccgc aatttcggga cgtcgcatgg cagagaccat cgccaggcgc  
 300  
 ggaggcattg ctgttctgcc ccaagatata cgggaggatt tcgtcgcccc gtccattcgg  
 360  
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact  
 420  
 gtcggtgagg ccatgaactt gctcaacaag cgc  
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1			5					10					15		
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20					25					30			
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35				40					45				
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70				75						80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100						105				110			
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115					120					125			
Asn	Leu	Leu	Asn	Lys	Arg										
		130													

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

accggtctcc cacggagttc tgtttcctca ggtactgcac tgtatacaac tctaaatgca  
 60  
 cctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc  
 120  
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct ccagaggaa  
 180  
 catgtaacgt ctgtgtaaca tgetatcctg cacacatctg aaagaatctg tgtacacaac  
 240  
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgact  
 300  
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt  
 360



gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt  
 420  
 gcacagttct cactgttctg cgtgcccagc cctcacact ggacgcccac ctcacactct  
 480  
 tctgccaagg gagactttgg ttctcccctt cctgtgctg gctgtgcggg ccacagtcct  
 540  
 ctgcacgcca gcagcatgac gcgt  
 564

<210> 2542  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2542  
 Met Leu Cys Thr His Phe Leu Ile Phe Cys Val Glu Ser Thr Ser Phe  
 1 5 10 15  
 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu  
 20 25 30  
 Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser  
 35 40 45  
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe  
 50 55 60  
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala  
 65 70 75 80  
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His  
 85 90 95  
 Ser Pro Leu His Ala Ser Ser Met Thr Arg  
 100 105

<210> 2543  
 <211> 387  
 <212> DNA  
 <213> Homo sapiens

<400> 2543  
 cgcctgaagg gggcggggaa aatggaatgg gggggaaggg cgcgggtggg gacatgctgg  
 60  
 aacgtgcccc tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta  
 120  
 ccgtcctga tgagattttt gtttttgctt aacaaagaaa tgtgtatgaa tgcacgtctg  
 180  
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc  
 240  
 tgtctgggtc ccccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag  
 300  
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gccctgtcc  
 360  
 aatggggccc agcaggcagc agtgctg  
 387

<210> 2544  
 <211> 122  
 <212> PRT

<213> Homo sapiens

<400> 2544

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Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
          20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
          35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
          50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
          85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
          100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
          115          120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

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gcgattattt tcgtgctgcc cggacttata atggtcggct ggtgggcagg tttcccgtac
60
tggaccaccc tcgtatctctg tctagtcggc ggcatacctcg gcgttatgta ctgcattccg
120
ctgcgtcggg cctcgtgac aggcctcgat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgcc tgttgctcga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

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<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

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Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
          20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
          35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
          50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

65		70		75		80									
Val	Ile	Ile	Val	Gly	Ser	Val	Val	Ser	Ala	Ala	Tyr	Ala	Leu	Leu	Ser
		85						90					95		
Asp	Leu	Lys	Leu	Val	Lys	Ser	Ala	Leu	Thr	Lys	Pro	Phe	Lys	Thr	Gly
		100						105					110		

<210> 2547  
 <211> 556  
 <212> DNA  
 <213> Homo sapiens

<400> 2547  
 acgcgtgcac acacacacac gcaggcgtac acgctcacao gtgcacacac acatatgagt  
 60  
 ttcccacaca tctcaccata tcactttctc tttacttttt aaagacaggg cacttgcctt  
 120  
 tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacao aggttataaa  
 180  
 cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt  
 240  
 caagtttgtg ttggaaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag  
 300  
 agggacaccc agccctgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga  
 360  
 aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt  
 420  
 catcaccaca atatgaaggc ctccttggtg taaatgactt ttttaggtcc caataagaaa  
 480  
 taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac  
 540  
 tatcagatca tctaga  
 556

<210> 2548  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens

<400> 2548  
 Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg  
 1 5 10 15  
 Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg  
 20 25 30  
 Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu  
 35 40 45  
 Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser  
 50 55 60  
 Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser  
 65 70 75 80  
 Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln  
 85 90 95  
 Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile  
 100 105

<210> 2549  
<211> 435  
<212> DNA  
<213> Homo sapiens

<400> 2549  
nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt  
60  
atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt  
120  
gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc  
180  
caacttattg gtcaattcgg tgtaggtttt tactctgctt tcatcgttgc tgataaagta  
240  
acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgctg ggtatctgat  
300  
ggttctggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact  
360  
ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta  
420  
acaaaatatt ctgat  
435

<210> 2550  
<211> 145  
<212> PRT  
<213> Homo sapiens

<400> 2550  
Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala  
1 5 10 15  
Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu  
20 25 30  
Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe  
35 40 45  
Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly  
50 55 60  
Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val  
65 70 75 80  
Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg  
85 90 95  
Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys  
100 105 110  
Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys  
115 120 125  
Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser  
130 135 140  
Asp  
145

<210> 2551  
<211> 403  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 2551

nngccggcca gcctcacatc agtctctccg ccccggggaa ggctcagcac tttaaatacga  
 60  
 ggactccact tctggggagc cctgggttcgt tcgcccacca ggcctaggct acgctccatg  
 120  
 ctccccagc aatctctgtc tacacctctc gcggcgccct gccctcctcc gacccctttc  
 180  
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct  
 240  
 ccagcctccc cgcgaggtac cagccccaca gtcttctggg agccattgtg gccagggagc  
 300  
 gcctctggac tgccaggctg ggttggggac cagggaacat cggctctactc aggtgtgagg  
 360  
 gggcaggtct ggctgcccc aaagtggct ccattctgga can  
 403

&lt;210&gt; 2552

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2552

Xaa	Pro	Ala	Ser	Leu	Thr	Ser	Val	Ser	Pro	Pro	Arg	Gly	Arg	Leu	Ser
1				5					10					15	
Thr	Leu	Asn	Arg	Gly	Leu	His	Phe	Trp	Gly	Arg	Leu	Val	Arg	Ser	Pro
		20						25					30		
Thr	Arg	Pro	Arg	Leu	Arg	Ser	Met	Leu	Pro	Gln	Gln	Ser	Leu	Ser	Thr
		35					40					45			
Pro	Pro	Ala	Ala	Pro	Cys	Pro	Pro	Pro	Thr	Pro	Phe	Gln	Pro	Xaa	Ser
		50				55					60				
Pro	Pro	Thr	Pro	Ser	Glu	Lys	Gln	Pro	Gln	Ile	Pro	Glu	Val	Glu	Ala
65					70				75					80	
Pro	Ala	Ser	Pro	Arg	Gly	Thr	Ser	Pro	Thr	Val	Phe	Trp	Glu	Pro	Leu
				85					90				95		
Trp	Pro	Gly	Thr	Ala	Ser	Gly	Leu	Pro	Gly	Trp	Val	Gly	Asp	Gln	Gly
		100						105				110			
Thr	Ser	Val	Tyr	Ser	Gly	Val	Arg	Gly	Gln	Val	Trp	Pro	Ala	Pro	Lys
		115					120					125			
Leu	Ala	Pro	Ser	Trp	Thr										
															130

&lt;210&gt; 2553

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2553

actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg  
 60  
 gagagataca gcatgggcca aggagcactg ggagccagca gcagctggaa gaggcaggag  
 120  
 gcatcctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt  
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg  
 240  
 gaccctcctg gcccctgtcc tggtccacc ctcagctgct ggcaggtggg tcaccaggcc  
 300  
 tctgccc aaa gaaactcctg caggcagctc tggaccccct gtcttacaca ccttctcact  
 360  
 gagcctgcc gcatcccagn  
 380

<210> 2554

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2554

Met	Lys	Gln	Arg	Leu	Glu	Arg	Tyr	Ser	Met	Gly	Gln	Gly	Ala	Leu	Gly
1				5				10						15	
Ala	Ser	Ser	Ser	Trp	Lys	Arg	Gln	Glu	Ala	Ser	Ser	Leu	Asp	Arg	Thr
			20					25					30		
Gly	Cys	Tyr	Trp	Val	Ser	Leu	Leu	Ser	Trp	Lys	Arg	Arg	Glu	Val	Cys
		35					40					45			
Leu	Ser	Gly	Gln	Gly	Leu	Leu	Arg	Ser	Thr	Gln	Gln	Gly	Gln	Gly	Gly
	50					55				60					
Arg	Asp	Pro	Pro	Gly	Pro	Cys	Pro	Gly	Ser	Thr	Leu	Ser	Cys	Trp	Gln
65					70					75				80	
Val	Gly	His	Gln	Ala	Ser	Ala	Gln	Arg	Asn	Ser	Cys	Arg	Gln	Leu	Trp
			85					90					95		
Thr	Pro	Cys	Leu	Thr	His	Leu	Leu	Thr	Glu	Pro	Ala	Ser	Ile	Pro	
			100					105					110		

<210> 2555

<211> 368

<212> DNA

<213> Homo sapiens

<400> 2555

ntccggatgg aaaagtaaag accagcaata gccataacg ccattaacac atacccatat  
 60  
 atgttggttaa tgctgcccgg tagttcgggtg gcattcttca tgggcaatag tttaatggga  
 120  
 gataacgcga ataatggtag tgtcgttcta gtgctcacag acctgggtcac ccaaatagaa  
 180  
 ggatttatat cctcccatat cctcattttt gtgctcgttg gcctcggcat tgtctttacc  
 240  
 gttgccactc gaggtgtaca gttccgcctc ttccgggcaca tgtggcacct catgctcgat  
 300  
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctcgat  
 360  
 cacgcggn  
 368

<210> 2556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2556

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Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
 20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
 35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
 50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
 85             90             95
Val Gly Leu Asp His Ala
100

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<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

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atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtgagccg
60
attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa ggggtggcaag atcgggtctct tcggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
 20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
 35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
 50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

65		70		75		80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His						
	85		90		95	
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly						
	100		105		110	
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr						
	115		120		125	
Ala Leu Val Phe Gly Gln Met Asn						
	130		135			

&lt;210&gt; 2559

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2559

```

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

&lt;210&gt; 2560

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2560

Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn														
1		5		10		15								
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu														
	20		25		30									
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu														
	35		40		45									
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp														
	50		55		60									
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys														
65		70		75		80								
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys														
	85		90		95									
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser														
	100		105		110									
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met														
	115		120		125									
Lys														



<210> 2561  
 <211> 429  
 <212> DNA  
 <213> Homo sapiens

<400> 2561  
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 60  
 atgtggagacc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga  
 120  
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac  
 180  
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac  
 240  
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat  
 300  
 ggaaaagggtg aacctgcgat ttttaaccta agcatcacag aagcccatga atcaggcccc  
 360  
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 420  
 attgtcgac  
 429

<210> 2562  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 2562  
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr  
 1 5 10 15  
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser  
 20 25 30  
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala  
 35 40 45  
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys  
 50 55 60  
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn  
 65 70 75 80  
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu  
 85 90 95  
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile  
 100 105 110  
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr  
 115 120 125  
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp  
 130 135 140

<210> 2563  
 <211> 267  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 2563

ggatcccaga cgagtgcctgg cagcagtatg ggggccgtgg gggcgacggc caccgtcagc  
60  
accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt  
120  
aaggccttta ccctttggga acaggcagag gccctcacia ggaagaacaa agaattcttt  
180  
gctcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggg ggacctgggtg  
240  
cactacacaa ggcagggcct ccagcgg  
267

&lt;210&gt; 2564

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2564

Gly	Ser	Gln	Thr	Ser	Ala	Gly	Ser	Ser	Met	Gly	Ala	Val	Gly	Ala	Thr
1				5					10					15	
Ala	Thr	Val	Ser	Thr	Pro	Val	Thr	Ile	Gln	Asn	Met	Thr	Ser	Ser	Tyr
			20					25					30		
Val	Thr	Ile	Thr	Ser	His	Val	Leu	Lys	Ala	Phe	Thr	Leu	Trp	Glu	Gln
		35					40					45			
Ala	Glu	Ala	Leu	Thr	Arg	Lys	Asn	Lys	Glu	Phe	Phe	Ala	Gln	Leu	Ser
	50					55					60				
Thr	Lys	Val	Arg	Val	Leu	Ala	Leu	Asn	Ser	Ser	Leu	Val	Asp	Leu	Val
65					70					75				80	
His	Tyr	Thr	Arg	Gln	Gly	Leu	Gln	Arg							
					85										

&lt;210&gt; 2565

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2565

cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg  
60  
tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc caccoccat  
120  
gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc  
180  
gacatgccc agttgcagca actcgggtgc tccgatgtgg tcgatctgcg ttccacctat  
240  
gaggtggcca gcgagggccc ggggccgctg accgggcgtg gggtgaccat ccaccccat  
300  
tccttcctgc ccgaccagca cgccaatgtg cac  
333

&lt;210&gt; 2566

&lt;211&gt; 111

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2566

```

Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1             5             10             15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
             20             25             30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
             35             40             45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
             50             55             60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65             70             75             80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
             85             90             95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
             100            105            110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

```

ngaattcaaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
60
agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gttttagtgg agaagaaacc ttaagagggtg actcgggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tgggtgacgat gtaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

```

<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1             5             10             15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
             20             25             30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
             35             40             45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
             50             55             60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

```

65              70              75              80
Gly His Val Trp Gly Pro Ser Thr Glu Thr Gln Leu Gly Asn Thr Leu
      85              90              95
Ile Gly Gly Val Val Gly Val Arg Gly Met Val Gly Asp Asp Val Asn
      100              105              110
Tyr Asp Val Ser Leu Gly Thr Pro Ile Lys Lys Pro Glu Gly Phe Asp
      115              120              125
Thr Asp Thr Arg
      130

```

&lt;210&gt; 2569

&lt;211&gt; 330

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2569

```

cttgctgctg gtgctgatgt gtccatgatt ggccagttcg gcgtcggttt ctactctgcc
60
tacctcgctcg ccgatagagt tgtcgtgacc accaagcaca acgatgacga gcagtacgtg
120
tgggagtgccc aagcgggcggt gtcgttcact gttactcgtg acacgtcagg ggagcagctt
180
ggcagggggca ctaagatcac actgttcctc aaggacgatc agctggagta ccttgaggag
240
cgtcgcctca aggatctggt caagaagcac tctgagttca tcagctaccc catctccctg
300
tggactgaaa agacaacaga gaaggaaatt
330

```

&lt;210&gt; 2570

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2570

```

Leu Ala Ala Gly Ala Asp Val Ser Met Ile Gly Gln Phe Gly Val Gly
1      5      10      15
Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Val Val Thr Thr Lys
      20      25      30
His Asn Asp Asp Glu Gln Tyr Val Trp Glu Ser Gln Ala Gly Gly Ser
      35      40      45
Phe Thr Val Thr Arg Asp Thr Ser Gly Glu Gln Leu Gly Arg Gly Thr
      50      55      60
Lys Ile Thr Leu Phe Leu Lys Asp Asp Gln Leu Glu Tyr Leu Glu Glu
65      70      75      80
Arg Arg Leu Lys Asp Leu Val Lys Lys His Ser Glu Phe Ile Ser Tyr
      85      90      95
Pro Ile Ser Leu Trp Thr Glu Lys Thr Thr Glu Lys Glu Ile
      100      105      110

```

&lt;210&gt; 2571

&lt;211&gt; 335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2571

gaattcgcca atgttttctc cggatatgggc tccacagtaa cccttatcgg ccgtccccc  
 60  
 gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgctcgggag  
 120  
 aaatgggatg tccgtttagg gcagggaaacg acagctatcg accaggtgga gaagcagcgt  
 180  
 gaagatgggt cttcctactt cgaaaccacc attacatttg aagacggcag cactgttacc  
 240  
 ggtgacgcat tcctagtgtc taccggacgt acccctaaca ccgaccgcct tggcctcgac  
 300  
 aatggttccg gtgtgaaggt tgaaagggga cgcgt  
 335

&lt;210&gt; 2572

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2572

Glu	Phe	Ala	Asn	Val	Phe	Ser	Gly	Met	Gly	Ser	Thr	Val	Thr	Leu	Ile
1			5					10						15	
Gly	Arg	Ser	Pro	Val	Leu	Leu	Lys	His	Leu	Asp	Asn	Glu	Leu	Ser	Glu
		20					25					30			
Leu	Phe	Thr	Glu	Ile	Ala	Arg	Glu	Lys	Trp	Asp	Val	Arg	Leu	Gly	Gln
	35					40				45					
Gly	Thr	Thr	Ala	Ile	Asp	Gln	Val	Glu	Lys	Gln	Arg	Glu	Asp	Gly	Ser
	50				55					60					
Ser	Tyr	Phe	Glu	Thr	Thr	Ile	Thr	Phe	Glu	Asp	Gly	Ser	Thr	Val	Thr
65				70					75					80	
Gly	Asp	Ala	Phe	Leu	Val	Ala	Thr	Gly	Arg	Thr	Pro	Asn	Thr	Asp	Arg
		85				90						95			
Leu	Gly	Leu	Asp	Asn	Gly	Ser	Gly	Val	Lys	Val	Glu	Arg	Gly	Arg	
		100					105						110		

&lt;210&gt; 2573

&lt;211&gt; 460

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2573

gtcgacaagt accggggcat tgtggttatg gggacggtag atctgggccg tctcgtcagg  
 60  
 gccggatcca taccggaccg tttcgtcagg gtggtcggac atcgacgaca ccgcagatgc  
 120  
 cgagacgacg ttgatacgtc caccggcgcg gtccgtgatc caccgcgtcg tcgccgttgc  
 180  
 cgccactggc acgatgaggg ccataccga gaagagaacg gccaccactc gcagaccacc  
 240  
 tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa  
 300  
 cgatcccacc agaacggagg agatgaaggt gagggcattg tgtgagggga ggatcgcggc  
 360

cactgaccac gccagtaccg gcaggggtcag gatcagcccg acgagaccgg aagtgatgcg  
 420  
 tagccaggaa tgacgggagg ttttcgtgtc agccacgcgt  
 460

<210> 2574  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

<400> 2574  
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro  
 1 5 10 15  
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg  
 20 25 30  
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg  
 35 40 45  
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn  
 50 55 60  
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly  
 65 70 75 80  
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn  
 85 90 95  
 Gly Gly Asp Glu Gly Glu Gly Ile Val  
 100 105

<210> 2575  
 <211> 3954  
 <212> DNA  
 <213> Homo sapiens

<400> 2575  
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 60  
 ccactctcgc gcctccgaac agccacaggg gcaaagccct gtcacccccca ggatccggtc  
 120  
 atcagggaaa gaggacaggg agaccagaag agggccagct gggacgaggg ggcggacgcc  
 180  
 caggaggcaa cttctgagac gcagctcctg agaggggcag ggaccaggcg cgggaggcca  
 240  
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 300  
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 360  
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 420  
 ctgtcctgtg gagcagcagc atccccgggg ccggcagagg cgccagtggc tgggcgggat  
 480  
 gagtctctga gggccactgt ggagcgcccc gccatggccc cccgcacct ctggagctgc  
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 660

ccccggccag ccagccgcca caggaactgg tgtgcctacg tggtgacccg gacagtgagc  
720  
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780  
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840  
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1020  
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1380  
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1920  
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1980  
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2100  
gccacgctgg agggattaca agaggttgtg ggccggctcc aggatcgtgt ggatgccag  
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2280

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gggccaccag gtccctcaagg tgaacaggga gtggaggggg caccagcagc ccctgtgccc  
3120  
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3180  
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3240  
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3300  
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3420  
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3600  
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3780  
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3840  
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3900



ccgccataact aaacgatcga ggaataaaga cacttggttt ttctaaaaaa aact  
3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
1				5					10					15	
Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
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 ataacttatt gttcatattc atttctaagt taatttaagt aatcatttat taagacagaa  
 6840  
 ttttgtataa actattttatt gtgctctctg tggaaactgaa gtttgattta tttttgtact  
 6900  
 acacggcatg ggtttgttga cactttaatt ttgctataaa tgtgtggaat cacaagttgc  
 6960  
 tgtgatactt catttttaaa ttgtgaactt tgtacaaatt ttgtcatgct ggatgttaac  
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 7080  
 aaaaaaaaaa aaaaaaaaaa  
 7098

<210> 2584

<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

Met	Glu	Val	Asp	Thr	Glu	Glu	Lys	Arg	His	Arg	Thr	Arg	Ser	Lys	Gly
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Val	Arg	Val	Pro	Val	Glu	Pro	Ala	Ile	Gln	Glu	Leu	Phe	Ser	Cys	Pro
			20					25					30		
Thr	Pro	Gly	Cys	Asp	Gly	Ser	Gly	His	Val	Ser	Gly	Lys	Tyr	Ala	Arg
		35					40					45			
His	Arg	Ser	Val	Tyr	Gly	Cys	Pro	Leu	Ala	Lys	Lys	Arg	Lys	Thr	Gln
		50				55					60				
Asp	Lys	Gln	Pro	Gln	Glu	Pro	Ala	Pro	Lys	Arg	Lys	Pro	Phe	Ala	Val
65				70					75					80	
Lys	Ala	Asp	Ser	Ser	Ser	Val	Asp	Glu	Cys	Asp	Asp	Ser	Asp	Gly	Thr
			85					90						95	
Glu	Asp	Met	Asp	Glu	Lys	Glu	Glu	Asp	Glu	Gly	Glu	Glu	Tyr	Ser	Glu
			100					105					110		
Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp

1845

545					550					555					560
Val	Asn	Ser	Asn	Arg	Asn	Ser	His	Arg	Ser	Leu	Ser	Gly	Cys	Pro	Ile
				565					570					575	
Ala	Ala	Ala	Glu	Lys	Leu	Ala	Lys	Ala	Gln	Glu	Lys	His	Gln	Ser	Cys
			580					585					590		
Asp	Val	Ser	Lys	Ser	Ser	Gln	Ala	Ser	Asp	Arg	Val	Leu	Arg	Pro	Met
		595					600					605			
Cys	Phe	Val	Lys	Gln	Leu	Glu	Ile	Pro	Gln	Tyr	Gly	Tyr	Arg	Asn	Asn
	610					615					620				
Val	Pro	Thr	Thr	Thr	Pro	Arg	Ser	Asn	Leu	Ala	Lys	Glu	Leu	Glu	Lys
625					630				635						640
Tyr	Ser	Lys	Thr	Ser	Phe	Glu	Tyr	Asn	Ser	Tyr	Asp	Asn	His	Thr	Tyr
				645					650					655	
Gly	Lys	Arg	Ala	Ile	Ala	Pro	Lys	Val	Gln	Thr	Arg	Asp	Ile	Ser	Pro
			660					665					670		
Lys	Gly	Tyr	Asp	Asp	Ala	Lys	Arg	Tyr	Cys	Lys	Asp	Pro	Ser	Pro	Ser
		675					680					685			
Ser	Ser	Ser	Thr	Ser	Ser	Tyr	Ala	Pro	Ser	Ser	Ser	Ser	Asn	Leu	Ser
	690					695					700				
Cys	Gly	Gly	Gly	Ser	Ser	Ala	Ser	Ser	Thr	Cys	Ser	Lys	Ser	Ser	Phe
705					710					715					720
Asp	Tyr	Thr	His	Asp	Met	Glu	Ala	Ala	His	Met	Ala	Ala	Thr	Ala	Ile
				725					730					735	
Leu	Asn	Leu	Ser	Thr	Arg	Cys	Arg	Glu	Met	Pro	Gln	Asn	Leu	Ser	Thr
			740					745					750		
Lys	Pro	Gln	Asp	Leu	Cys	Ala	Thr	Arg	Asn	Pro	Asp	Met	Glu	Val	Asp
	755						760					765			
Glu	Asn	Gly	Thr	Leu	Asp	Leu	Ser	Met	Asn	Lys	Gln	Arg	Pro	Arg	Asp
	770				775						780				
Ser	Cys	Cys	Pro	Ile	Leu	Thr	Pro	Leu	Glu	Pro	Met	Ser	Pro	Gln	Gln
785					790				795						800
Gln	Ala	Val	Met	Asn	Asn	Arg	Cys	Phe	Gln	Leu	Gly	Glu	Gly	Asp	Cys
				805					810					815	
Trp	Asp	Leu	Pro	Val	Asp	Tyr	Thr	Lys	Met	Lys	Pro	Arg	Arg	Ile	Asp
			820					825					830		
Glu	Asp	Glu	Ser	Lys	Asp	Ile	Thr	Pro	Glu	Asp	Leu	Asp	Pro	Phe	Gln
	835						840					845			
Glu	Ala	Leu	Glu	Glu	Arg	Arg	Tyr	Pro	Gly	Glu	Val	Thr	Ile	Pro	Ser
	850					855					860				
Pro	Lys	Pro	Lys	Tyr	Pro	Gln	Cys	Lys	Glu	Ser	Lys	Lys	Asp	Leu	Ile
865					870				875						880
Thr	Leu	Ser	Gly	Cys	Pro	Leu	Ala	Asp	Lys	Ser	Ile	Arg	Ser	Met	Leu
				885					890					895	
Ala	Thr	Ser	Ser	Gln	Glu	Leu	Lys	Cys	Pro	Thr	Pro	Gly	Cys	Asp	Gly
			900					905					910		
Ser	Gly	His	Ile	Thr	Gly	Asn	Tyr	Ala	Ser	His	Arg	Ser	Leu	Ser	Gly
		915					920					925			
Cys	Pro	Arg	Ala	Lys	Lys	Ser	Gly	Ile	Arg	Ile	Ala	Gln	Ser	Lys	Glu
	930					935					940				
Asp	Lys	Glu	Asp	Gln	Glu	Pro	Ile	Arg	Cys	Pro	Val	Pro	Gly	Cys	Asp
945					950				955						960
Gly	Gln	Gly	His	Ile	Thr	Gly	Lys	Tyr	Ala	Ser	His	Arg	Ser	Ala	Ser
				965					970					975	
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	Gly	Tyr	Leu	Asn	Gly

980 985 990  
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro  
 995 1000 1005  
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr  
 1010 1015 1020  
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys  
 1025 1030 1035 1040  
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser  
 1045 1050 1055  
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile  
 1060 1065 1070  
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys  
 1075 1080 1085  
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu  
 1090 1095 1100  
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu  
 1105 1110 1115 1120  
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln  
 1125 1130 1135  
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val  
 1140 1145 1150  
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro  
 1155 1160 1165  
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile  
 1170 1175 1180  
 Gln Val  
 1185

&lt;210&gt; 2585

&lt;211&gt; 542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2585

cactcactcc tccacagaat ttggcctcag ccagcccccac gctcagcatg cccagccctg  
 60  
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc  
 120  
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct  
 180  
 gggcctctag cctcaaaga gctaaagtat gtgagcactt tctcagccct ttaaaccgat  
 240  
 taagtcatgt catcctcaca aggctgctgt gttttattac ctctgtttca ggtgcaagtc  
 300  
 atccccggga ggagtggtag ggatgccgcc tgaccctggg ccacctggct gcagcatctg  
 360  
 tgttgatgac caccctctg cctcaggctt tgctcctgaa tgttcttgct ctctaggtct  
 420  
 gtccgctcct ggccctgctc ttcttaactc cgttcaagcc ccctgggtca cacgtccatg  
 480  
 ctcactactt caatgacgag gatgctggcg atccccaaat ctcctaattc aagtgcagat  
 540  
 ct  
 542

<210> 2586  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 2586  
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro  
 1 5 10 15  
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser  
 20 25 30  
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser  
 35 40 45  
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly  
 50 55 60  
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val  
 65 70 75 80  
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr  
 85 90 95  
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro  
 100 105 110  
 Gln Ala Leu Leu Leu Asn Val Leu Ala Leu  
 115 120

<210> 2587  
 <211> 435  
 <212> DNA  
 <213> Homo sapiens

<400> 2587  
 ncgaatatcc atgcagcgat cccgggcgga atgctctcca acatggagtc ccagcttgag  
 60  
 gccagggcg ctggagaccg catggatgag gtcatgaagg aggtgccgag cgttcgtaag  
 120  
 gatgccggct acccgccgct ggtcaccccc tcgtcccaga tcgtgggaac ccaggcgggtg  
 180  
 ttcaacgtct tgatgggcaa tgggttcgtac aagaatctca ctgccgagtt tgccgacctc  
 240  
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc  
 300  
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag  
 360  
 tgggatcagt tggtcgagca ggccaagagt cttgagggtc tcgacggctc cgacgaggac  
 420  
 gttcttacca acgcg  
 435

<210> 2588  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 2588  
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

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      1             5             10             15
Ser Gln Leu Glu Ala Gln Gly Ala Gly Asp Arg Met Asp Glu Val Met
      20             25             30
Lys Glu Val Pro Arg Val Arg Lys Asp Ala Gly Tyr Pro Pro Leu Val
      35             40             45
Thr Pro Ser Ser Gln Ile Val Gly Thr Gln Ala Val Phe Asn Val Leu
      50             55             60
Met Gly Asn Gly Ser Tyr Lys Asn Leu Thr Ala Glu Phe Ala Asp Leu
      65             70             75             80
Met Leu Gly Tyr Tyr Gly Lys Pro Ile Gly Glu Leu Asn Pro Glu Ile
      85             90             95
Val Glu Met Ala Lys Lys Gln Thr Gly Lys Glu Pro Ile Asp Cys Arg
      100            105            110
Pro Ala Asp Leu Leu Glu Pro Glu Trp Asp Gln Leu Val Glu Gln Ala
      115            120            125
Lys Ser Leu Glu Gly Phe Asp Gly Ser Asp Glu Asp Val Leu Thr Asn
      130            135            140
Ala
145

```

<210> 2589  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2589
ccggcgaaga aggacatggc catggtcttc ggcgcgactc attacgtcga cccgacggcc
60
ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgctcga ttctgcgcatc
120
gaggtcgctcg gcatcgctcga ggtcatggag caggcctact gggcgggcgcg acgcggcgccg
180
acgatcgctct acgtcggggc gctggggcatc gacgccaagc tggctcctgcc ggcgaacgac
240
ctgcacggcg ggcgaagac gatcatcggc tgcgccaacg gattggggcg agtgcgccacc
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gactatgcca agatgatctc gctggctgag accggacggc tggacctggg cgggatgac
360
acgcgt
366

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<210> 2590  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2590
Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val
      1             5             10             15
Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg
      20             25             30
Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val
      35             40             45
Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100              105              110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115              120

```

<210> 2591  
 <211> 341  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2591
acgcgtaaag gcatgacctc accttatcat caggggcaca cgtgtgttat tctggggctg
60
agcagccccc gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gtcctggga agacggggag ggttgaggtt acatgaggga
300
gaggggtcag ttggtgcatt cacagaacag caggggtggcc a
341

```

<210> 2592  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

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<400> 2592
Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
1              5              10              15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20              25              30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35              40              45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50              55              60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65              70              75              80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85              90              95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100              105

```

<210> 2593  
 <211> 501  
 <212> DNA  
 <213> Homo sapiens



&lt;400&gt; 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg  
 60  
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcggtacc  
 120  
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc  
 180  
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg  
 240  
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa  
 300  
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg  
 360  
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat  
 420  
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca  
 480  
 gctgagatgt ctcttaagct t  
 501

&lt;210&gt; 2594

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1			5						10				15		
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
			35				40					45			
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
			50			55					60				
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65					70				75					80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
				85				90						95	
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100				105					110			
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
		115				120						125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
		130				135					140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150				155					160	
Ala	Glu	Met	Ser	Leu	Lys	Leu									
					165										

&lt;210&gt; 2595

&lt;211&gt; 928

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2595

agatcttcca gatgcaacaa tgatcaatta agacacgcgg cgacatggtg gcccctgcct  
 60  
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg  
 120  
 gtcacaattt ctggggctca ctcatataac accaacaaat gggatatttg tgaagaactt  
 180  
 cgccctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg  
 240  
 tgggtggctgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg  
 300  
 aacagtgccg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa  
 360  
 tcggatccac tgaacacagaa acagagtttg ccacttcaga aggaggcatt agaagctaata  
 420  
 gttaccacagg atctgaagct tccctggcttc gtagaagaat cctgtgaaca tacagaccaa  
 480  
 tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt  
 540  
 tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta  
 600  
 agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tggttctgga  
 660  
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa  
 720  
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag  
 780  
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct  
 840  
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt  
 900  
 gacattcttc ttggtcaaca taatgatg  
 928

&lt;210&gt; 2596

&lt;211&gt; 309

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2596

Arg	Ser	Ser	Arg	Cys	Asn	Asn	Asp	Gln	Leu	Arg	His	Ala	Ala	Thr	Trp
1				5					10					15	
Trp	Pro	Leu	Pro	His	Pro	Pro	Gly	Ile	Pro	Val	Ile	Pro	Ala	Ser	His
			20					25					30		
Phe	Met	Gly	Tyr	Asn	Leu	Met	Leu	Val	Thr	Ile	Ser	Gly	Ala	His	Ser
		35					40					45			
Tyr	Asn	Thr	Asn	Lys	Trp	Asp	Ile	Cys	Glu	Glu	Leu	Arg	Leu	Arg	Glu
	50					55					60				
Leu	Glu	Glu	Val	Lys	Ala	Arg	Ala	Ala	Gln	Met	Glu	Lys	Thr	Met	Arg
65					70				75					80	
Trp	Trp	Ser	Asp	Cys	Thr	Ala	Asn	Trp	Arg	Glu	Lys	Trp	Ser	Lys	Val
				85				90						95	
Arg	Ala	Glu	Arg	Asn	Ser	Ala	Gly	Lys	Glu	Gly	Arg	Gln	Leu	Arg	Ile

```

<400> 2597
ccatgggttg  gaatgcaaga  gacacactct  agacttacta  gaggagcaag  agcaggactt
60
ggctgcacct  gcagctgagg  gttagcagga  attaggagat  aacagtagaa  tagggctaga
120
ctgaaaaggc  ctttgatgcc  aggttaggaa  atttacattt  tatccacaaa  atccaaatcc
180
tcctttaata  atgagatgtc  tttaacaagt  tttgggcaag  agtggtatgg  ctgacctggg
240
gtcctgggaa  ggaactgtgt  ggggatgggt  tgcaggactt  acctaggggt  ggaaaggcac
300
aagcagcatg  gggctgtggc  agctaccaga  ggtaaaggga  catttcaggg  aaagacttgg
360
caggacaaga  ccttccttgg  atggatggat  gaataccaga  aacagggacc  caagagaaaag
420
gccgagtttc  atagggagag  aagatgggtc  atgtatgagg  catgttgagc  ttgtactgat
480
ggtgagacgt  ccagtcgaca  gtactaccca  ctggccagtg  agaaatgtgg  gaccaggggt
540
caggaggaaa  ctggggccgg  aaatgagcat  ttggaaggcg  ccaggggtgga  agcgggtggg
600

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tcactccacg agtgctatatt cacttacgcg t  
631

<210> 2598  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 2598  
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg  
1 5 10 15  
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn  
20 25 30  
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser  
35 40 45  
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp  
50 55 60  
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg  
65 70 75 80  
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg  
85 90 95  
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg  
100 105

<210> 2599  
<211> 356  
<212> DNA  
<213> Homo sapiens

<400> 2599  
nagatccttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg  
60  
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg  
120  
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc  
180  
acagatatcc ctcctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca  
240  
gaagcagtat tccacacagt ggtgttggaa agacacgaaa gccctgacat tgaagacttt  
300  
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn  
356

<210> 2600  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 2600  
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val  
1 5 10 15  
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu  
20 25 30  
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35              40              45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
  50              55              60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
  65              70              75              80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85              90              95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100              105              110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601  
 <211> 329  
 <212> DNA  
 <213> Homo sapiens

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<400> 2601
gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
  60
tacttgatca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
  120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
  180
ttgatcgccct tgcccgaaga cctcggtatc cgccgcaccg acgccacccg cgaactgttg
  240
gccgccaaga gcgtggccga cctggtggag tggtcgggtg gcttgtgcaa cccgcccggc
  300
aagttcagga gctggtaaat gcgcgcct
  329

```

<210> 2602  
 <211> 105  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
  1              5              10              15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20              25              30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35              40              45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50              55              60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
      65              70              75              80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85              90              95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100              105

```

<210> 2603  
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccaggctg gtggtcagga  
60  
gcatcgggttc ggtgggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca  
120  
ggttgtggta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga  
180  
agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga  
240  
tctcggagat gatcgcgtaa ctttcattgt cgtagaggat cttgcacgca tcgatgatgc  
300  
gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac  
360  
cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttgtccg  
420  
cgg  
423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5				10						15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
			35				40					45			
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
			50				55				60				
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65					70					75				80	
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
				85				90						95	
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggaggag ggcattgtcaa aagcgactgt atccagaggg tttgatttaa acatttttca  
60  
aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccacttcttc  
120  
tttgcattgt gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggagaa  
180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aagggtgccc  
240  
caaagtacct cctctgaggg gagagaaagg agagaggagg agagacagct ttcataaat  
300  
ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gagc  
354

<210> 2606  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2606  
Met Ser Lys Ala Thr Val Ser Arg Gly Phe Asp Leu Asn Ile Phe Gln  
1 5 10 15  
Asn Ile Cys Gly Lys Gln Arg Gly Glu Gly Ile Ser Pro Thr Phe Phe  
20 25 30  
Ser Thr Ser Ser Leu His Ala Gly Thr Cys Ser Thr Phe Lys Met Cys  
35 40 45  
His Phe Gly Arg Lys Gly Arg Asn Asn Tyr Leu Lys Gly Ile His Val  
50 55 60  
Ser Met Ser Pro Phe Ser Ser Ala Glu Gly Cys Pro Lys Val Pro Pro  
65 70 75 80  
Leu Arg Arg Glu Lys Gly Glu Arg Arg Arg Asp Ser Phe His Gln Met  
85 90 95  
Gly His Pro Gly Leu  
100

<210> 2607  
<211> 297  
<212> DNA  
<213> Homo sapiens

<400> 2607  
tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg  
60  
tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg  
120  
atgacatgga cagaacccccg tcggaaaaaa gccggaatgt gcaaaccxaa attcccacca  
180  
cacggggggc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa  
240  
actttttttt ttttaannnn anacccccaa aaaaaccaa aaaaaaaatt taaaaaa  
297

<210> 2608  
<211> 95  
<212> PRT  
<213> Homo sapiens

<400> 2608  
Met Ile Arg Tyr Pro Asn Gln Gln Arg Lys Gln Arg Lys Leu Leu Leu  
1 5 10 15  
Phe Leu Cys Cys Phe Phe Phe Leu Arg Thr Asp Leu Ala Pro Ala Pro

	20		25		30										
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly
	35		40		45										
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile
	50		55		60										
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe
65			70		75					80					
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys	
			85		90									95	

&lt;210&gt; 2609

&lt;211&gt; 305

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2609

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ncgccatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgata cctatccgct catctggaga cccatgcggt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acacccccccc ctcgcatctg
180
tgaaagtctt acctcggggg cgatcatctcg gctgtcatcg tcggcaaata actcagctgg
240
ccgtaccctt cgatcatgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

```

&lt;210&gt; 2610

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2610

Met	Met	Ser	Gly	Lys	Asp	Asp	Pro	Gly	Met	Ala	Lys	Val	Tyr	Gly	Phe
1			5				10						15		
Val	Asp	Thr	Ser	Leu	Thr	Ile	Pro	Ile	Arg	Ser	Ser	Gly	Asp	Pro	Cys
	20		25				30								
Val	Pro	Trp	Thr	Pro	Ile	Ala	Tyr	Glu	Lys	Ile	Phe	Phe	Phe	Pro	Pro
	35		40				45								
Lys	Lys	His	Pro	Pro	Leu	Ala	Ser	Val	Lys	Val	Leu	Pro	Arg	Gly	Arg
	50		55		60										
His	Leu	Gly	Cys	His	Arg	Arg	Gln	Ile	Thr	Gln	Leu	Ala	Val	Pro	Phe
65			70		75					80					
Val	Ile	Ala	Arg	Ala	Thr	Asp	Leu	Asp	Gly	Xaa	Ala	Cys	Thr	Ala	Thr
			85		90									95	

Thr Thr

&lt;210&gt; 2611

&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 2611

gccgccgcga tcgacggcga ctctcgacc agctgggtgt ccagctcgct gcaaaccgct  
60  
gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcacctg  
120  
acgccagcg ccaccgctgt cggagctcag gtgcgccgcy tcgaggtggc aacagccaac  
180  
ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccttac  
240  
ggcgagacct catgggtccg gttcaccgcy accggcaccg acgacggctc ccccggcgtg  
300  
cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg  
342

&lt;210&gt; 2612

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2612

Ala	Ala	Ala	Ile	Asp	Gly	Asp	Ser	Ser	Thr	Ser	Trp	Val	Ser	Ser	Ser
1			5					10						15	
Leu	Gln	Thr	Ala	Val	Gly	Gln	Trp	Leu	Gln	Val	Asp	Phe	Asp	His	Pro
		20					25						30		
Val	Thr	Asn	Ala	Thr	Ile	Thr	Leu	Thr	Pro	Ser	Ala	Thr	Ala	Val	Gly
		35				40						45			
Ala	Gln	Val	Arg	Arg	Val	Glu	Val	Ala	Thr	Ala	Asn	Gly	Thr	Ser	Thr
	50					55					60				
Ile	Arg	Phe	Asp	Gln	Pro	Gly	Lys	Pro	Leu	Thr	Ala	Ala	Leu	Pro	Tyr
65				70					75					80	
Gly	Glu	Thr	Ser	Trp	Val	Arg	Phe	Thr	Ala	Thr	Gly	Thr	Asp	Asp	Gly
			85					90					95		
Ser	Pro	Gly	Val	Gln	Phe	Gly	Ile	Thr	Asp	Phe	Ser	Val	Thr	Gln	Tyr
			100					105					110		

Asp Ala

&lt;210&gt; 2613

&lt;211&gt; 414

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2613

acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggccctgggcc ctgggcatca  
60  
ttctcctcct ccaaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga  
120  
tatgccccta ctgggaaggg ccaagtgggc aggcagagtc tggggtggag cgaggtgggg  
180  
ctgggaagca ctctgctttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc  
240  
ctcctcctgg gaggaggaaa ggagggctcg cctccaggtc tcaggctgag ggagtgggct  
300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact  
 360  
 ctggggccccc tcccaggctc tcctcgtggc aggcagggac ttggggccagc atgg  
 414

<210> 2614  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

<400> 2614  
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly  
 1 5 10 15  
 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser  
 20 25 30  
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu  
 35 40 45  
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg  
 50 55 60  
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala  
 65 70 75 80  
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser  
 85 90 95  
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp  
 100 105

<210> 2615  
 <211> 394  
 <212> DNA  
 <213> Homo sapiens

<400> 2615  
 nnngccgccc cctcggccg cagcgcgctt cttttgcgc ncgacgtcag ccagaaggcg  
 60  
 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga tatectcgtc  
 120  
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgcacg tgtgcgaaga cgatttcgac  
 180  
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag  
 240  
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc  
 300  
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggctc  
 360  
 atggccttga acctggcgcc gcacgggtgct cgct  
 394

<210> 2616  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 2616  
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

1	5	10	15
Ser Gln Lys Ala Asp Val Asp Ala Met Leu Lys Glu Thr Leu Ala Gln			
20	25	30	
Phe Gly His Ile Asp Ile Leu Val Asn Asn Ala Gly Val Thr His Ala			
35	40	45	
Ala Asp Phe Leu Asp Val Cys Glu Asp Asp Phe Asp Arg Val Met Arg			
50	55	60	
Ile Asn Leu Lys Ser Met Phe Leu Cys Gly Gln Ala Ala Ala Arg Glu			
65	70	75	80
Met Val Lys Arg Asn Ser Gly Cys Ile Ile Asn Met Ser Ser Val Asn			
85	90	95	
Ala Glu Leu Ala Ile Pro Asn Gln Val Pro Tyr Val Val Ser Lys Gly			
100	105	110	
Ala Ile Asn Gln Leu Thr Lys Val Met Ala Leu Asn Leu Ala Pro His			
115	120	125	
Gly Ala Arg			
130			

<210> 2617  
 <211> 513  
 <212> DNA  
 <213> Homo sapiens

<400> 2617  
 naccggttgg catcatgctc acagcactgg gggttccctt ctttcttttc ctctcagaa  
 60  
 agacattgtg agatgggaaa tatcatggaa acacctatac tttccggctc ccacttgaac  
 120  
 gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt  
 180  
 atgcagcca tacttgcccc caacggttct gggaagacca ccctgggtacg cacgttatgc  
 240  
 ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg  
 300  
 tccgcatact gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct  
 360  
 gacctcaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag  
 420  
 ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg  
 480  
 tgcttcgccg atcgacgcgt caccactctc tca  
 513

<210> 2618  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

<400> 2618
Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
1 5 10 15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
20 25 30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
   50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65              70              75              80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100              105              110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115              120              125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130              135              140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
  145              150              155              160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165              170

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&lt;210&gt; 2619

&lt;211&gt; 348

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2619

```

nnaaatcttcg acgaccttga ggttttcttc aagctgttgc cgcgttcggc anccggggaa
  60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
 120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
 180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
 240
gcgggcggtc acccttacgg ctcggtgtac cccggggccga ttggtgcggt gctcaatccg
 300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
 348

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&lt;210&gt; 2620

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2620

```

Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1              5              10              15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20              25              30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35              40              45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50              55              60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
  65              70              75              80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

85 90 95  
 Val Leu Asn Pro Gln Leu Arg Gly Val Glu His Pro Val Asp Arg Gly  
 100 105 110  
 Leu Pro Tyr Ala  
 115

<210> 2621  
 <211> 1485  
 <212> DNA  
 <213> Homo sapiens

<400> 2621  
 acgcgtgcag gtaaaccaga ggccgtgtga ccagctcagt gctggtttac ggaacaactc  
 60  
 ttacttttaa aaattacttg ttcccccaaa ttgttgagtg ccgccgtttg gtttcctatg  
 120  
 ttttctttcc ctgttttgat tttgctgaag ggagaggtgg tgggtggttag gatcagagct  
 180  
 ctcttgcat ccgtggggag gatttgctgg tgggtggcttc gggctcatgc ccagacacac  
 240  
 tcaactgcccc gtctgtccaa ggccctccct tcccctttgc tgggtgggagg agctcgtgtg  
 300  
 ctccctggcc gcttactgga agggcggttt tcagagctgc agggacaggg tgagcagctg  
 360  
 aagggctagg agggaagccg gccccgcgtc tgcagaagct gcatttcagc tgaatctgtg  
 420  
 tttcagcctc agttggttgc accgttagcc cctctcctcc cggatggtca tgtttttgtc  
 480  
 acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttggaa  
 540  
 atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgttgtcc  
 600  
 tgcagttgtc attgtcttct ccaccgggct gttcccattt atttctgtg gaactgaatc  
 660  
 cctcctccct ccactccttg ggagcccagg tggtccttgg ccaccattca ggctttccaa  
 720  
 gaagccaacc accttgagga ttttttttct tgaatttcgc tgttttcttc tgcttccttt  
 780  
 agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc  
 840  
 catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgtaggaat  
 900  
 tgggtcaaaat tcatctcttt cttaagccc atcaactccc aggacggttt gagttactca  
 960  
 gttacctaag cttgctattc atccaaatca ttttctagag tcaactgtata aggttctatg  
 1020  
 agtagctgtg tatgaataaa tattacctgt ctacctcaaa atacacatac tgctgaagca  
 1080  
 ttctgtacaa ccgtgtgtta tcacagtgc gttttaagtg taacngttga acttaggcac  
 1140  
 tttcctgtgt ggcggaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa  
 1200  
 attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatttg  
 1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt  
 1320  
 aaatacacag acgggcgagt ggcgcccgtg tcatgtctt cagccagtgg tgaccctgct  
 1380  
 tttgtaaccg cgttaacctg acaaaacctc agcagcagaa gtccttattt ttctaggagt  
 1440  
 ttatcgtgca gacagtcttc actacaggac tcggccctgg ggccc  
 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1				5				10					15		
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20					25					30		
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
			35				40					45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55				60					
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70					75				80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

nggatccgaa ttcgcggccg cgtcgactgg agaggacggc gttattttta ttaactggag  
 60  
 gcgacggcgg ctgcggcggc ggcgggaccc ccaggcctcc tccgggggtat gaaaatcggc  
 120  
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcggc  
 180  
 ggtggtagtg gcggcggcgg cggcggcggc agcagcggca ggagggcaga gatggaaccc  
 240  
 acctttcccc agggatatggt tatgttcaac caccgtcttc ccccggtcac cagcttcacc  
 300  
 cggcggcggg ggtcggccgc ccctcccccg caatgcgtgt tatectcttc tacctccgca  
 360  
 gccccggccg ctgagcccc ccctccgcca gccccggaca tgactttcaa gaaggagccg  
 420  
 gcggcgtcag ccgcggcctt cccctcgcag aggacctcct gggggttctt gcagtctttg  
 480  
 gttagcatca aacaggagaa acccgcggat cctgaggagc agcagtccca ccaccaccat  
 540  
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga  
 600

ggcgggtgaag ggggggagtca cggcggtcatc caggacctca gtattctcca ccagcatgtc  
660  
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat  
720  
gaccaccatg gcactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca  
780  
aagccagaat ctcaggaat caaagccaag aggaagccaa gtgcatcttc caaaccttct  
840  
ttggttgag atggagaagg tgccatctc tccccaagtc agaaacctca tatctgtgat  
900  
cactgtagt ctgctttccg aagctcctat cacctgcgga gacatgtcct cattcataca  
960  
ggagaaagac ctttccagt cagccagtgt agtatgggtt tcattcagaa atacctacta  
1020  
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&lt;210&gt; 2624

&lt;211&gt; 895

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2624

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1867

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Gly Lys Pro Ser Gly Ser Leu Gly Ile Val Ser Asn Asn Ser Val Glu		495
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Thr Ile Gly Leu Leu Gln Ser Thr Ser Gly Lys Gln Gly Gln Ile Ser		510
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Ser Asn Tyr Asp Asp Ala Met Gln Phe Ser Lys Lys Arg Arg Tyr Leu		525
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Pro Thr Ala Ser Ser Asn Ser Ala Phe Ser Ile Asn Val Gly His Met		540
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Gly Gln Ser Val Thr Ser Val Leu Pro Ser Ser Leu Pro Lys Pro Pro		720
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Phe Gly Met Leu Phe Gly Ser Gln Pro Gly Leu Tyr Leu Ser Ala Leu		735
	740	745
Asp Ala Thr His Gln Gln Leu Thr Pro Ser Gln Glu Leu Asp Asp Leu		750
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Ile Asp Ser Gln Lys Asn Leu Glu Thr Ser Ser Ala Phe Gln Ser Ser		765
	770	775
Ser Gln Lys Leu Thr Ser Gln Lys Glu Gln Lys Asn Leu Glu Ser Ser		780
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Gln Lys Asp Ile Glu Pro Arg Thr Thr Tyr Gln Ile Glu Asn Phe Ala		815
	820	825
Gln Ala Phe Gly Ser Gln Phe Lys Ser Gly Ser Arg Val Pro Met Thr		830
	835	840
Phe Ile Thr Asn Ser Asn Gly Glu Val Asp His Arg Val Arg Thr Ser		845
	850	855
Val Ser Asp Phe Ser Gly Tyr Thr Asn Met Met Ser Asp Val Ser Glu		860
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Pro Cys Ser Thr Arg Val Lys Thr Pro Thr Ser Gln Ser Tyr Arg		880

885

890

895

&lt;210&gt; 2625

&lt;211&gt; 1398

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2625

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<400> 2628  
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Ala Pro Phe Ser Ser Thr Ser Phe Ser Val Pro Lys Lys Ala Arg Ala
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Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
      50           55           60
Phe Phe Arg Ser Ser Gly Ser Arg Glu Arg His Ser Phe Lys Val Phe
      65           70           75           80
Phe Leu Cys Ile Pro Pro Pro Leu His Ala
      85           90

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&lt;210&gt; 2629

&lt;211&gt; 650

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2629

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&lt;210&gt; 2630

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2630

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Phe Ser Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
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Lys Cys Ala Asn Asp Val Phe Gln Val Gly Ala Arg Asp Gly Gln Gly
      35           40           45
Gln Val Lys Gln Cys Arg Pro Val Gly Asp

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&lt;210&gt; 2631

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2631

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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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Ile	Leu	Lys	Phe	Asn	Ser	Lys	Phe	Glu	Ser	Gly	Asn	Leu	Arg	Lys	Val
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Ile	Gln	Ile	Arg	Lys	Asn	Glu	Tyr	Asp	Leu	Ile	Leu	Asn	Ser	Asp	Ile
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Asn	Ser	Asn	His	Tyr	His	Gln	Trp	Phe	Tyr	Phe	Glu	Val	Ser	Gly	Met
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Lys Gly Leu Leu Gln Tyr Leu Ala Ala Val Lys Arg Leu Pro Leu Val						
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Tyr Cys Asp Tyr His Gly His Ser Arg Lys Lys Asn Val Phe Met Tyr						
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Asn Asp Leu Ile Glu Ser Ser Cys Lys Val Thr Ser Pro Thr Thr Tyr						
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Ala Glu Ser Asn Asp Glu Leu Asp Ile Glu Leu Ala Glu Asn Val Gly						
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&lt;210&gt; 2633

&lt;211&gt; 1569

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2633

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&lt;210&gt; 2634

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2634

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&lt;210&gt; 2635

&lt;211&gt; 1062

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2635

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&lt;210&gt; 2636

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Phe His Pro Leu Glu Trp Leu Ala Arg Glu Ala Cys Asn Gln Asp Ala  
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Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln  
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Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg  
65 70 75 80  
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala  
85 90 95  
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile  
100 105 110  
Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile  
115 120 125  
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val  
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145 150 155 160  
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp  
165 170 175  
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180 185 190  
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu  
195 200 205  
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210 215 220  
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro  
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<210> 2639  
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<212> DNA  
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<211> 645

<212> PRT

<213> Homo sapiens

<400> 2640

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Pro	Asp	His	Asn	Arg	Leu	Val	Val	Arg	Glu	Phe	Glu	Asn	Leu	Pro	Gly
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Glu	Thr	Glu	Glu	Lys	Ser	Ile	Leu	Leu	Glu	Ser	Asp	Asn	Glu	Asp	Glu
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Lys	Leu	Ser	Arg	Gly	Gln	His	Cys	Ile	Glu	Ile	Ser	Ser	Leu	Pro	Gly
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Asp	Leu	Val	Ile	Val	Glu	Lys	Asp	His	Ser	Ala	Thr	Thr	Glu	Pro	Leu
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Asp	Val	Thr	Lys	Thr	Gln	Thr	Phe	Ser	Val	Val	Pro	Asn	Gln	Asp	Lys
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Asn	Asn	Glu	Ile	Met	Lys	Leu	Leu	Thr	Val	Gly	Thr	Ser	Glu	Ile	Ser
			245						250					255	
Ser	Arg	Asp	Ile	Asp	Pro	His	Val	Glu	Gly	Gln	Ile	Gly	Gln	Val	Ala

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Glu Met Gln Lys Asn Lys Ile Ser Lys Asp Asp Asp Ile Met Ser Glu					
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Asp Leu Pro Gly His Gln Gly Asp Leu Ser Thr Phe Leu His Gln Glu					
290		295		300	
Gly Lys Arg Glu Lys Ile Thr Pro Arg Asn Gly Glu Leu Phe His Cys					
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Val Ser Glu Asn Glu His Gly Ala Pro Thr Arg Lys Asp Met Val Arg					
	325		330		335
Ser Ser Phe Val Thr Arg His Ser Arg Ile Pro Val Leu Ala Gln Glu					
	340		345		350
Ile Asp Ser Thr Leu Glu Ser Ser Ser Pro Val Ser Ala Lys Glu Lys					
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Leu Leu Gln Lys Lys Ala Tyr Gln Pro Asp Leu Val Lys Leu Leu Val					
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Glu Lys Arg Gln Phe Lys Ser Phe Leu Gly Asp Leu Ser Ser Ala Ser					
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Asp Lys Leu Leu Glu Glu Lys Leu Ala Thr Val Pro Ala Pro Phe Cys					
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Glu Glu Glu Val Leu Thr Pro Phe Ser Arg Leu Thr Val Asp Ser His					
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Leu Ser Arg Ser Ala Glu Asp Ser Phe Leu Ser Pro Ile Ile Ser Gln					
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Ser Arg Lys Ser Lys Ile Pro Arg Pro Val Ser Trp Val Asn Thr Asp					
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Gln Val Asn Ser Ser Thr Ser Ser Gln Phe Phe Pro Arg Pro Pro Pro					
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Gly Lys Pro Pro Thr Arg Pro Gly Val Glu Ala Arg Leu Arg Arg Tyr					
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Lys Val Leu Gly Ser Ser Asn Ser Asp Ser Asp Leu Phe Ser Arg Leu					
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Ala Gln Ile Leu Gln Asn Gly Ser Gln Lys Pro Arg Ser Thr Thr Gln					
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Cys Lys Ser Pro Gly Ser Pro His Asn Pro Lys Thr Pro Pro Lys Ser					
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Pro Val Val Pro Arg Arg Ser Pro Ser Ala Ser Pro Arg Ser Ser Ser					
545		550		555	560
Leu Pro Arg Thr Ser Ser Ser Ser Pro Ser Arg Ala Gly Arg Pro His					
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His Asp Gln Arg Ser Ser Ser Pro His Leu Gly Arg Ser Lys Ser Pro					
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Pro Ser His Ser Gly Ser Ser Ser Ser Arg Arg Ser Cys Gln Gln Glu					
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His Cys Lys Pro Ser Lys Asn Gly Leu Lys Gly Ser Gly Ser Leu His					
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&lt;210&gt; 2641

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2641

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&lt;210&gt; 2642

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2642

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			20					25					30		
Val	Thr	Val	Arg	Ile	His	Gly	Ser	Met	Leu	Arg	Ala	His	Arg	Cys	Val
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Leu	Ala	Ala	Gly	Ser	Pro	Phe	Phe	Gln	Asp	Lys	Leu	Leu	Leu	Gly	Tyr
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Ser	Asp	Ile	Glu	Ile	Pro	Ser	Val	Val	Ser	Val	Gln	Ser	Val	Gln	Lys
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Leu	Ile	Asp	Phe	Met	Tyr	Ser	Gly	Val	Leu	Arg	Val	Ser	Gln	Ser	Glu
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Ala	Leu	Gln	Ile	Leu	Thr	Ala	Ala	Ser	Ile	Leu	Gln	Ile	Lys	Thr	Val
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Ile	Asp	Glu	Cys	Thr	Arg	Ile	Val	Ser	Gln	Asn	Val	Gly	Asp	Val	Phe
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Pro	Gly	Ile	Gln	Asp	Ser	Gly	Gln	Asp	Thr	Pro	Arg	Gly	Thr	Pro	Glu
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Ser	Gly	Thr	Ser	Gly	Gln	Ser	Ser	Asp	Thr	Glu	Ser	Gly	Tyr	Leu	Gln

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 <213> Homo sapiens

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<211> 871

<212> PRT

<213> Homo sapiens

<400> 2644

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Asp	Thr	Ala	Leu	Asp	Asn	Cys	Gln	Asp	Leu	Phe	Leu	Leu	Asp	Pro	Pro
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Arg	Pro	Asn	Leu	Thr	Ser	His	Pro	Asp	Gly	Ser	Glu	Asp	Leu	Glu	Pro
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Leu	Ala	Gly	Gly	Ser	Pro	Glu	Ala	Thr	Ser	Pro	Asp	Val	Thr	Glu	Thr
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Lys	Asn	Ser	Pro	Leu	Met	Glu	Asp	Phe	Phe	Glu	Glu	Gly	Phe	Ser	Gln
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Glu	Ile	Ile	Glu	Met	Leu	Ser	Lys	Asp	Gly	Phe	Trp	Asn	Ser	Asn	Phe
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Gly	Glu	Ala	Cys	Ile	Glu	Asp	Thr	Trp	Leu	Asp	Ser	Leu	Leu	Gly	Asp
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Pro	Glu	Ser	Leu	Leu	Arg	Ser	Asp	Ile	Ala	Thr	Asn	Gly	Glu	Ser	Pro
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Thr	Glu	Cys	Lys	Ser	His	Glu	Leu	Lys	Arg	Gly	Leu	Ser	Pro	Val	Ser
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Thr	Val	Ser	Thr	Gly	Glu	Asp	Ser	Met	Val	His	Asn	Val	Ser	Glu	Lys
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Thr	Leu	Thr	Pro	Ala	Lys	Ser	Lys	Glu	Tyr	Arg	Gly	Glu	Phe	Phe	Ser
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Tyr	Ser	Asp	His	Ser	Gln	Gln	Asp	Ser	Val	Gln	Glu	Gly	Glu	Lys	Pro
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Tyr	Gln	Cys	Ser	Glu	Cys	Gly	Lys	Ser	Phe	Ser	Gly	Ser	Tyr	Arg	Leu
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Thr	Gln	His	Trp	Ile	Thr	His	Thr	Arg	Glu	Lys	Pro	Thr	Val	His	Gln
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Lys	Thr	His	Thr	Gly	Tyr	Lys	Phe	Tyr	Val	Cys	Asn	Glu	Tyr	Gly	Thr
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Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr		
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Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln						
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Lys Ala Phe Arg Cys His Ser Ser Leu Ser Arg His Gln Arg Val His						
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&lt;210&gt; 2645

&lt;211&gt; 1018

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2645

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1018

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&lt;210&gt; 2646

<211> 199  
 <212> PRT  
 <213> Homo sapiens

<400> 2646

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 20           25           30
Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35           40           45
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
 50           55           60
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65           70           75           80
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85           90           95
Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
100           105           110
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
115           120           125
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
130           135           140
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
145           150           155           160
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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Ser Gly Ser His Lys Arg Ser
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<210> 2647  
 <211> 1368  
 <212> DNA  
 <213> Homo sapiens

<400> 2647

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480

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1368

&lt;210&gt; 2648

&lt;211&gt; 389

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2648

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Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp Phe  
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Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu Ala  
35 40 45  
Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser Trp  
50 55 60  
Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu Glu  
65 70 75 80  
Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe Gly  
85 90 95  
Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu Glu  
100 105 110  
Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile Glu  
115 120 125  
Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser Leu

130 135 140  
 Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val Gln  
 145 150 155 160  
 Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp  
 165 170 175  
 Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met  
 180 185 190  
 Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro  
 195 200 205  
 Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys  
 210 215 220  
 Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile  
 225 230 235 240  
 Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile  
 245 250 255  
 Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu  
 260 265 270  
 Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro  
 275 280 285  
 Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro  
 290 295 300  
 Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys  
 305 310 315 320  
 Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp  
 325 330 335  
 Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly  
 340 345 350  
 Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro  
 355 360 365  
 Lys Phe Leu Lys Arg Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly  
 370 375 380  
 Lys Pro Ile Leu Phe  
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&lt;210&gt; 2649

&lt;211&gt; 1299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2649

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 aatgatgtca agcaccatgg ccagttttat gaatggcttc ctgtgtctaa tgaccctgac  
 360  
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 420

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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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		20						25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys	
		50				55				60					
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65					70				75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85					90					95		
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
			100				105					110			
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
		115					120					125			
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

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Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu				
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Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu				160
	165		170	175
Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val				
	180		185	190
Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr				
	195		200	205
Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys				
	210		215	220
Gly Pro Asp His Leu Tyr Glu Thr Lys Thr Leu Gln Gly Thr Lys				
225		230		235
Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser				240
	245		250	255
Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala				
	260		265	270
Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser				
	275		280	285
Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg				
	290		295	300
Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly				
305		310		315
Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val				
	325		330	335
Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys				
	340		345	350
Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly				
	355		360	365
Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp				
	370		375	380
Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile				
385		390		395
Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys				
	405		410	415
His Phe Ser Gly Arg Val Glu Met His Val His Pro				
	420		425	

&lt;210&gt; 2651

&lt;211&gt; 628

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2651

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300

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 420  
 gtgcagaacg acagcaaccc ttcagcttcc cagcctacca ctggaccctc tgctgcctct  
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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

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			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55					60				
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70					75				80	
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
		130				135					140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
			165						170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
		180						185					190		
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Leu

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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 2103

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 <211> 70  
 <212> PRT  
 <213> Homo sapiens

<400> 2654  
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 Ser Asp Ser Lys Cys Leu Leu Leu Leu Gly Ala Val Ala His Ala Cys  
 35 40 45  
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly  
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 Asp Arg Asp Tyr Pro Gly  
 65 70

<210> 2655  
 <211> 1752  
 <212> DNA  
 <213> Homo sapiens

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1560  
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1620  
ccataaaatg ataaatttta agtatattta tcttttagtca aaaaggcaat caactgtcct  
1680  
agttttattt atttatttat ttgagacaga gtctcgctct gtcccccagg ctgtagtgca  
1740  
gtgatgcaat ct  
1752

&lt;210&gt; 2656

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2656

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Met Glu Thr Met Trp Glu Ile Pro Ala Ile Gly His Phe Leu Cys Leu
 1          5          10          15
Ala Gln Gln Ile Leu Asn Leu Pro Glu Ile Val Phe Tyr Glu Leu Glu
          20          25          30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
          35          40          45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
          50          55          60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
65          70          75          80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
          85          90          95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
          100          105          110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
          115          120          125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
          130          135          140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145          150          155          160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
          165          170          175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
          180          185          190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
          195          200          205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
          210          215          220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225          230          235          240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
          245          250          255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
          260          265          270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
          275          280          285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
          290          295          300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305          310          315          320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
          325          330          335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
          340          345          350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
          355          360          365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
          370          375          380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385          390          395          400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
          405          410          415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

```

	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435		440		445										
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450		455		460										
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
465			470		475				480						
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
	485		490												

&lt;210&gt; 2657

&lt;211&gt; 972

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2657

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nnctcgagct ctccccgccc accgtctggt ttatattctg ttataaatgg ggaggcctcc
60
aggggggtcag agaccacagc ccagtagcct gggacaagcc gccagtccc tctggtctct
120
gtcctgttgt ctaagggccca aggggcagta gcccctcttc caggggccct gagcacagag
180
gcgtcagatc agagttgccca tcttcaactt gatatgcccc ccacatccca gcagctctgt
240
gggcccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac
300
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc
360
tatggaaaca cccacacgtg tgcagatcgc tgcaatgaaa gggtcctgca tgggggttggg
420
taattccagc tgggaccgcc taggagcgcc atgcagctgt gggaacaagg ttgctgtcca
480
cacagacatg aagggtattcc ccgtggaatg aggttagaaa aggaaggcca agagtggacg
540
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
600
aagtgggaga cagagaccaa catctgcact gcctgtgcct gccacactct cccctcgggg
660
ccagaggggtg gcctctgggg aggggctggc gagaggggat gccaggcctg ggctgcagca
720
gacttgggtg gtcatggagg atccatgccca tcaacggcag gctgggggtgc cctccccggg
780
ccagcaccaa gcatgcatgg ttggtgatgt ggaacttacg cagagcgtgg cggctgggca
840
ggcggctgtg caggggctgg gcatggatat acagggctcg gtagaactcc tggcagtccc
900
gtccccgct ccgctgcagg tggtcagga ggtcacagag ccgcacacgc aaggatgcct
960
tgggggttcg ga
972

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&lt;210&gt; 2658

&lt;211&gt; 76

&lt;212&gt; PRT

<213> Homo sapiens

<400> 2658

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Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile
 1           5           10           15
Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
 20           25           30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
 35           40           45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
 50           55           60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65           70           75
```

<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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actagtgaaa gaaacggaag caagatttcc agatgtagca aatgggttta ttacggaaat
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aattcatttt aagaattatt atgatctgaa tgtgaggctg aagaggaaca gaaaagaaag
120
aatggagaga acaccttcaa acgcattgga cccccgctgg agaagcctgt ggagaagggtg
180
cagaggggtgg aggccctccc gagggccgtt ccgcagaacc tgccacagcc acagatgcca
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tgcggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
360
gtcaactatg acttcggtcc catccacatg cccctggagc acaacctgcc catgcacttt
420
ggccccccagc cgcggcatcg cttctgatgg ccccgaaatcc ccattgagca gcacaaagcc
480
cgtttgggggt aggagtgtgg atggagaacc ctcccccaag gctggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gtaggctggg tttcttccca cccctttcct agaagggtta
600
ctgctcctgg aagagtggac ggatccataa taaagacgtc ccaaattggtg aaaaaaaaaa
660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691
```

<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

```
Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10           15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val
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	20		25		30										
Gln	Arg	Val	Glu	Ala	Leu	Pro	Arg	Pro	Val	Pro	Gln	Asn	Leu	Pro	Gln
	35						40					45			
Pro	Gln	Met	Pro	Pro	Tyr	Ala	Phe	Ala	His	Pro	Pro	Phe	Pro	Leu	Pro
	50					55					60				
Pro	Val	Arg	Pro	Val	Phe	Asn	Asn	Phe	Pro	Leu	Asn	Met	Gly	Pro	Ile
65					70					75				80	
Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp
			85					90					95		
Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe
		100						105					110		
Gly	Pro	Gln	Pro	Arg	His	Arg	Phe								
	115						120								

&lt;210&gt; 2661

&lt;211&gt; 1395

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2661

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60  
tgtattggaa aagatgcacc gattgctctt aagaggaaac tggagatgaa agccttgagg  
120  
gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg  
180  
aatcacccgat ctcttatact cctggatgaa tgcagtaagg tggtcctaga taatatccat  
240  
gggtgtcctt taagaataat gatcaacata ttgcagtcct gcaaagacct ccagtaccat  
300  
aatttggatc tcttcaaggg acttgcagat tatgtggctg caactttcga catctggaag  
360  
ttcagaaaag ttctttttat cctcatttta ttgaaaacc ttggctttcg acctgttggg  
420  
ttaatggacc tgtttatgaa gagaatagta gaggatcctg aatccctaaa catgaaaaac  
480  
attctatcta ttcttcatac ttactcttct ctcaatcatg tctacaaatg ccagaacaaa  
540  
gaacagtctg tggaagttat ggctagtgtc ctgactgggt atcttcacac tatttcttct  
600  
gaaaacttat tggatgcagt atattcattt tgcttgatga attactttcc cctggctcct  
660  
tttaatcagc ttctgcaaaa agacatcatc agtgagctgc tgacatcaga tgacatgaag  
720  
aatgcttaca agctgcatac tttggatact tgtctaaaac ttgatgatac tgtctatctg  
780  
agggacatag ccttgtcact cccacagctg ccgcgggagc tgccatcgtc acatacaaat  
840  
gcaaaggtgg cagaggtgct gagcagcctt ctgggaggtg aaggacactt ctcaaaggat  
900  
gtgcacttgc cacacaatta tcatattgat ttgaaatca gaatggacac taacaggaat  
960  
caagtgtctac cactttctga tgtggataca acttctgcta cagatattca aagagtagct  
1020

gtgctatgtg tttccagatc tgcttattgt ttgggttcaa gccaccccag aggattcctt  
 1080  
 gctatgaaaa tgcggcattt gaatgcaatg ggttttcatg tgatcttggt caataactgg  
 1140  
 gagatggaca aactagagat ggaagatgca gtcacatttt tgaagactaa aatctattca  
 1200  
 gtagaagctc ttctgtgtgc tgctgtaaat gtgcaaagca cacaataaag tgaaaatcaa  
 1260  
 ccttttcata ttaggagaca tgcatttgta aaaattaata aagatgacaa gtcagttgtc  
 1320  
 aatggaattg agctatctgc taagacaaaa aatgttacct cagttcacta ttaaaattaa  
 1380  
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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1				5					10					15	
Val	Val	Met	Lys	Cys	Ile	Gly	Lys	Asp	Ala	Pro	Ile	Ala	Leu	Lys	Arg
			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
		35					40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
	50					55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70						75				80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
				85					90					95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
		115					120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
	130					135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150						155				160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
			165					170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
		180					185						190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
	195					200						205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
	210				215						220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
			245				250						255		
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

	260		265		270										
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
	275						280					285			
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro
	290					295					300				
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
305					310					315				320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
			325						330					335	
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
		340						345					350		
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355						360					365			
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370					375						380			
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
385					390					395					400
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
			405						410					415	

&lt;210&gt; 2663

&lt;211&gt; 1024

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2663

```

nngtggctgc agcggggccc gcgtggtgcc tectgaggcg gccccggat gaagagatct
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gggaaccggg gagccgaggt aacgaacagc tcggtggcag ggcctgactg ctgcggagggc
120
ctcggcaata ttgatttttag acaggcagac ttctgcgtta tgaccgggct gctgggctac
180
gtggaccccc tggatcccag ctttgtgggt gccgtcatca ccatcacctt caatccgctc
240
tactggaatg tgggtgcacg atgggaacac aagaccgca agctgagcag ggccttcgga
300
tccccctacc tggcctgcta ctctctaagc gtcaccatcc tgctcctgaa cttcctgcgc
360
tcgcactgct tcacgcaggc catgctgagc cagcccagga tggagagcct ggacaccccc
420
gcggcctaca gcctgggcct cgcgctcctg ggactgggag tcgtgctcgt gctctccagc
480
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600
gccaactacc tgggctgggc catcatgcac gccagcccca cgggcctgct cctgacggtg
660
ctggtggccc tcacctacat aatggctctc ctatacgaag agcccttcac cgctgagatc
720
taccggcaga aagcctccgg gtcccacaag aggagctgat tgagctgcaa cagctttgct
780
gaaggcctgg ccagcctccc tcgtgcccc aagggcaggc cctgcgcagg gcgagaatgg
840

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tgctgtgc tcagggcctc ccccgcggtg ggctgcccc gtgccttgga acctgtgcc  
900  
ttggggaccc tggacgtgcc gacatatggc cattgagctc caaccacac attcccatcc  
960  
accaataaag gcaccctgac cccaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
1020  
aaaa  
1024

<210> 2664  
<211> 199  
<212> PRT  
<213> Homo sapiens

<400> 2664  
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Ala Ala Val Ile Thr Ile Thr Phe Asn Pro Leu Tyr Trp Asn Val Val  
20 25 30  
Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser  
35 40 45  
Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn  
50 55 60  
Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg  
65 70 75 80  
Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu  
85 90 95  
Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly  
100 105 110  
Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala  
115 120 125  
Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp  
130 135 140  
Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro  
145 150 155 160  
Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala  
165 170 175  
Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala  
180 185 190  
Ser Gly Ser His Lys Arg Ser  
195

<210> 2665  
<211> 720  
<212> DNA  
<213> Homo sapiens

<400> 2665  
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120  
gcgccaatgc gaagcgttgc agtcgcttga ctcacctgag gctctccaag gataccttca  
180

atgcctgcac tgtaagggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt  
 240  
 tgacgttttt ctaaaccatgg gatgcagtct gtgcagcctg cagaagcaag aggagcagta  
 300  
 caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgac  
 360  
 caggctgtgg aagcttttcaa gacagccaag gagcccatag tgggtgcaggt gttgagaaga  
 420  
 acaccaagga ccaaaatggt cacgcctcca tcagagtctc agctggtgga cacgggaacc  
 480  
 caaaccgaca tcacctttga acatatcatg gccctcacta agatgtcctc tcccagccca  
 540  
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 600  
 ccaaattgact acattggaga catccatcag gagatggaca gggaggagct ggagctggag  
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 gaagtggacc tctacagaat gaacagccag gacaagctgg gcctcactgt gtgctaccgg  
 720

<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

Met	Gln	Ser	Val	Gln	Pro	Ala	Glu	Ala	Arg	Gly	Ala	Val	Gln	Ile	Thr
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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
		20					25					30			
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
	35					40					45				
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
	50				55					60					
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65				70				75						80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85				90						95		
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
	100						105					110			
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
	115					120					125				
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
	130				135					140					
Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
145				150											

<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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 120  
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac  
 180  
 gagtgccggc tccgcgggga gagctgcctt gtacactgcc tggccggggg ctccaggagc  
 240  
 gtgacactgg tgatcgcata catcatgacc gtcactgact ttggctggg  
 289

<210> 2668  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<400> 2668  
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 Asn Pro Phe Ser Val Cys Pro Arg Trp Val Pro Gly Leu Cys Trp Arg  
 35 40 45  
 Thr Arg His Phe Lys Glu Ser Ile Lys Phe Ile His Glu Cys Arg Leu  
 50 55 60  
 Arg Gly Glu Ser Cys Leu Val His Cys Leu Ala Gly Val Ser Arg Ser  
 65 70 75 80  
 Val Thr Leu Val Ile Ala Tyr Ile Met Thr Val Thr Asp Phe Gly Trp  
 85 90 95

<210> 2669  
 <211> 4285  
 <212> DNA  
 <213> Homo sapiens

<400> 2669  
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 gatctggcga cctcgggccc gcgcctaaga ggtcagactg cggagcctgc gggtcgccag  
 180  
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<212> PRT

<213> Homo sapiens

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&lt;211&gt; 814

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2671

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<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

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		20						25					30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
		35					40					45			
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
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Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
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Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
			85					90					95		
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
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Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115					120					125			
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
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Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
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Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
			165					170						175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
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Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
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Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
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225					230					235				240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
			245					250						255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

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Lys	Arg	Pro	Gly	Thr	Ile	Arg	Lys	Ala	Gln	Asn	Leu	Leu	Lys	Gln	Tyr				
		275					280					285							
Ser	Gln	His	Gly	Leu	Asp	Gly	Lys	Lys	Gly	Gly	Ser	Asn	Leu	Ile	Pro				
	290					295					300								
Leu	Glu	Gly	Arg	Asp	Asp	Met	Leu	Asp	Val	Glu	Thr	Asp	Ala	Tyr	Ile				
305				310						315					320				
His	Cys	Val	Ser	Ala	Phe	Val	Lys	Leu	Ala	Gln	Ser	Glu	Tyr	Gln	Leu				
			325						330					335					
Leu	Ala	Asp	Ile	Ile	Pro	Glu	His	His	Gln	Lys	Lys	Thr	Phe	Asp	Ser				
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Leu	Ile	Gln	Asp	Ala	Leu	Asp	Gly	Leu	Met	Leu	Glu	Gly	Glu	Asn	Ile				
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Val	Ser	Ala	Ala	Arg	Lys	Ala	Ile	Val	Arg	His	Asp	Phe	Ser	Thr	Val				
	370					375					380								
Leu	Thr	Val	Phe	Pro	Ile	Leu	Arg	His	Leu	Lys	Gln	Thr	Lys	Pro	Glu				
385				390						395					400				
Phe	Asp	Gln	Val	Leu	Gln	Gly	Thr	Ala	Ala	Ser	Thr	Lys	Asn	Lys	Leu				
			405					410						415					
Pro	Gly	Leu	Ile	Thr	Ser	Met	Glu	Thr	Ile	Gly	Ala	Lys	Ala	Leu	Glu				
		420					425					430							
Asp	Phe	Ala	Asp	Asn	Ile	Lys	Asn	Asp	Pro	Asp	Lys	Glu	Tyr	Asn	Met				
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Pro	Lys	Asp	Gly	Thr	Val	His	Glu	Leu	Thr	Ser	Asn	Ala	Ile	Leu	Phe				
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Leu	Gln	Gln	Leu	Leu	Asp	Phe	Gln	Glu	Thr	Ala	Gly	Ala	Met	Leu	Ala				
465				470						475				480					
Ser	Gln	Glu	Thr	Ser	Ser	Ser	Ala	Thr	Ser	Tyr	Ser	Ser	Glu	Phe	Ser				
			485					490					495						
Lys	Arg	Leu	Leu	Ser	Thr	Tyr	Ile	Cys	Lys	Val	Leu	Gly	Asn	Leu	Gln				
		500					505						510						
Leu	Asn	Leu	Leu	Ser	Lys	Ser	Lys	Val	Tyr	Glu	Asp	Pro	Ala	Leu	Ser				
	515					520					525								
Ala	Ile	Phe	Leu	His	Asn	Asn	Tyr	Asn	Tyr	Ile	Leu	Lys	Ser	Leu	Glu				
	530				535					540									
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690

<210> 2675  
 <211> 711  
 <212> DNA  
 <213> Homo sapiens

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 420  
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<210> 2676  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 2676  
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 Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met  
 35 40 45  
 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Leu Gln Trp  
 50 55 60  
 Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu  
 65 70 75 80  
 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe  
 85 90 95  
 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys  
 100 105 110  
 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

	115						120					125							
Arg	Tyr	Arg	Arg	Ala	Ala	Ser	His	Glu	Glu	Ser	Glu	Ser	Glu	Ile	Leu				
	130						135					140							
Ile	Ser	Ala	Asp	Asp	Glu	Met	Glu	Glu	Ser	Asp	Val	Glu	Glu	Asp	Leu				
145					150					155					160				
Arg	Arg	Leu	Thr	Pro	Leu	Lys	Pro	Val	Lys	Lys	Lys	Lys	His	Arg	Phe				
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Gly	Leu	Pro	Val																
			180																

&lt;210&gt; 2677

&lt;211&gt; 735

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2677

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735

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&lt;210&gt; 2678

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2678

Leu	Ala	Ala	Leu	Ser	Ala	Ala	Trp	Gly	Arg	Asp	Gly	Gln	Val	His	Gly				
1				5				10					15						
Pro	Ala	Cys	Val	Ser	Thr	Pro	Pro	Ser	Ala	Gly	Ala	Phe	Ser	Leu	Leu				
			20					25				30							
Arg	Glu	Asn	Phe	Ser	His	Ala	Pro	Ser	Pro	Asp	Met	Ser	Ala	Ala	Ser				



35	40	45
Leu Cys Ala Leu Glu Gln	Leu Met Met Ala Gln	Ala Gln Glu Cys Val
50	55	60
Phe Glu Gly Leu Ser Pro	Pro Ala Ser Met Ala	Pro Gln Asp Cys Leu
65	70	75
Ala Gln Leu Arg Leu Ala	Gln Glu Ala Ala Gln	Val Ser Ser Gly Thr
85	90	95
Arg Val Arg Met Gln Gly	Val Gly Pro Ser Trp	Gly Gln Ser Pro Gly
100	105	110
Pro Gly Met Arg Glu Leu	Ser His Leu Leu Pro	Cys Val Ser Ala Pro
115	120	125
Ser Gln Leu Leu Ser Cys	Ser Leu Gly Gly Leu	Val Arg Asn Leu Gly
130	135	140
Thr Arg Ala Ser Ala Ser	Arg Glu Trp His Lys	Ala Ala Gly Thr Glu
145	150	155
Val Pro Gly Arg Leu Leu	Gly Trp Trp Ser	
165	170	

<210> 2679  
 <211> 560  
 <212> DNA  
 <213> Homo sapiens

<400> 2679  
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 ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga  
 180  
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 240  
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 300  
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 360  
 gcacaggggg tgcaccagga cgcagccaga cctggggccag ttcgcgccga ctcttctcca  
 420  
 ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg  
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<210> 2680  
 <211> 133  
 <212> PRT  
 <213> Homo sapiens

<400> 2680  
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 1 5 10 15  
 Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

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      20      25      30
Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
      35      40      45
Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
      65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
      130

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<210> 2681  
 <211> 585  
 <212> DNA  
 <213> Homo sapiens

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<400> 2681
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120
tctggaatag tttatttcat gaccatgtgc agagggggtg atggggcaag cctcacaagc
180
cccggaggtc tgtggctgag gtgtacctg gctttgttgc ctggaactgc tctgactctg
240
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300
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360
tgtgtctgtg tcactctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
420
ggacaacgtt ccagatttgt tttcagtact aatggttcat ctcttttttt ctgttcatcc
480
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585

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<210> 2682  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

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<400> 2682
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Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
      20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

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```

          35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
   50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
          85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
          100          105          110
Met Val Met Lys
          115

```

&lt;210&gt; 2683

&lt;211&gt; 498

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2683

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naccggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
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atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtggtg gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca ccccccatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

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&lt;210&gt; 2684

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
 1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
          20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
          35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
          50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

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130

&lt;210&gt; 2687

&lt;211&gt; 399

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2687

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60  
caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga  
120  
tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct  
180  
gacagtccgc taggccttat gttaagatac cggaaagata atgaaaggac caaacacaag  
240  
aaaagacagc aatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa  
300  
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399

&lt;210&gt; 2688

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
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			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
		35					40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50					55					60				
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65					70				75					80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85					90							

&lt;210&gt; 2689

&lt;211&gt; 560

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2689

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180

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<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

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Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
		20						25					30		
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
	35					40						45			
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55					60				
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
65					70										

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

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 240  
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<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

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		20						25					30		
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
	35						40					45			
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
	50					55					60				
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
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Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
			85						90					95	
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
		100						105					110		
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
	115						120					125			
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
	130					135					140				
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
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Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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180  
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240  
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300  
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc  
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420

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 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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		20					25						30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
	35						40					45			
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50				55						60				
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65					70					75					80
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
			85						90					95	
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
		100						105					110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
	115						120					125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
	130					135					140				
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145					150					155					160
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
			165						170					175	
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
		180						185					190		
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
	195						200					205			
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210					215					220				
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225					230					235					240
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
			245					250						255	
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260

265

&lt;210&gt; 2695

&lt;211&gt; 2265

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2695

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120  
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&lt;210&gt; 2696

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2696

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		20					25					30			
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
		35				40					45				
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
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Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
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Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
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		100					105						110		
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			245					250						255	
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		260					265						270		
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		275					280					285			
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290					295						300				
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305				310					315					320	
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			325					330						335	
Cys	Pro	Glu	Glu	Glu	Asn	Met	Asp	Asp	Gln	Trp	Met	Gln	Asp	Glu	Met
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Ala	Pro	Asp	Arg	Lys	Gly	Phe	Arg	Leu	Leu	Ala	Ser	Pro	Arg	Ser	
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	515						520					525			
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530					535					540					
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&lt;210&gt; 2698

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2698

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Pro Asn Ile Asn Ile Lys Glu Pro Arg Trp Asp Gln Ser Thr Phe Ile
      20           25           30
Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu
      35           40           45
Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
      50           55           60
Arg Gln Gly Ile Val Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
65           70           75           80
Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
      85           90           95
Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
      100          105          110
Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
      115          120          125
Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
      130          135          140
Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
145          150          155          160
Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
      165          170          175
Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
      180          185          190
Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
      195          200          205
Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
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Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
225          230          235          240
Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
      245          250          255
Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
      260          265          270
Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
      275          280          285
Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
      290          295          300
Val Thr Ser Leu Glu Ala Glu Leu Gln Ala Lys Ile Gln Glu Ser His
305          310          315          320
Pro Glu Leu Arg Arg Val Tyr Phe Asn Lys Gly Leu
      325          330

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&lt;210&gt; 2699

&lt;211&gt; 974

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2699

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&lt;210&gt; 2700

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2700

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Pro	Glu	Leu	Pro	Asp	Ile	Leu	Lys	Gln	Phe	Thr	Lys	Ala	Ala	Ile	Arg
			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
		35					40					45			
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
	50					55				60					
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70				75					80		
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
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<212> PRT
<213> Homo sapiens
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1938



80

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          20             25             30
Lys Ala Ile Lys Ala Gly Ile Lys Cys Lys Pro Pro Leu Cys Ser Asn
          35             40             45
Ser Pro Ile Cys Ile Ala Arg Glu Cys Ser Gly Pro Trp Gly Lys Gly
          50             55             60
Leu Leu Pro Pro Glu Gly Thr Leu Leu Pro Arg Pro Leu Leu Gly Glu
65          70             75             80
Gly Pro Lys Gly Glu Ala Ser Lys Phe Pro Leu Phe Phe Asp Leu Ser
          85             90             95
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 <212> PRT  
 <213> Homo sapiens

<400> 2706  
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 Thr Val Thr Asp Pro Arg Asn Leu Leu Leu Ser Gly Ala Gln Leu Glu  
 35 40 45  
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro  
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780
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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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			20					25					30		
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			35				40					45			
Pro	Phe	Asp	Phe	Arg	Arg	Phe	Asp	Ile	Tyr	Arg	Lys	Val	Pro	Lys	Asp
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Thr	Glu	Val	Val	Asn	Glu	Leu	Tyr	Val	Asp	Asp	Pro	Asp	Lys	Asp	Ser
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Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
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Phe	His	Val	Ser	Thr	His	Ser	Ala	Thr	Ala	Gln	Pro	Gln	Asn	Pro	Asp
			180					185					190		
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Gln	Asn	Ile	His	Gly	Ala	Phe	Asn	Ala	Leu	Gly	Gly	Ala	Asp	Arg	Leu
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Thr	Ser	Asn	Pro	Leu	Ala	Ser	His	Asp	Tyr	Ile	Leu	Lys	Ile	Val	Pro

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				245					250					255	
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			260					265					270		
Ile	Pro	Ala	Ile	Trp	Phe	Arg	Tyr	Asp	Leu	Ser	Pro	Ile	Thr	Val	Lys
		275					280					285			
Tyr	Thr	Glu	Arg	Arg	Gln	Pro	Leu	Tyr	Arg	Phe	Ile	Thr	Thr	Ile	Cys
	290				295					300					
Ala	Ile	Ile	Gly	Gly	Thr	Phe	Thr	Val	Ala	Gly	Ile	Leu	Asp	Ser	Cys
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Ile	Phe	Thr	Ala	Ser	Glu	Ala	Trp	Lys	Lys	Ile	Gln	Leu	Gly	Lys	Met
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His

&lt;210&gt; 2709

&lt;211&gt; 984

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2709

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<212> PRT  
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35 40 45  
Ala Ser Gly Gln Ala Lys Ser Ser Ser Lys Glu Ser Lys Asp Ser Lys  
50 55 60  
Thr Ser Ser Lys Asp Asp Lys Gly Ser Thr Ser Ser Thr Ser Gly Ser  
65 70 75 80  
Ser Gly Ser Ser Thr Lys Asn Ile Trp Val Ser Gly Leu Ser Ser Asn  
85 90 95  
Thr Lys Ala Ala Asp Leu Lys Asn Leu Phe Gly Lys Tyr Gly Lys Val  
100 105 110  
Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys  
115 120 125  
Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile  
130 135 140  
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu  
145 150 155 160  
Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp  
165 170 175  
Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp  
180 185 190  
Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser  
195 200 205  
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<212> DNA  
<213> Homo sapiens

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6536

&lt;210&gt; 2712

&lt;211&gt; 2096

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2712

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Cys Ile Met Ala Lys Ala Ser Ser Asp Val Gln Val Ser Gly Phe His
          20           25           30
Arg Lys Ile Gln His Val Lys Asn Glu Leu Cys His Met Leu Ser Leu
      35           40           45
Glu Glu Val Ala Pro Val Leu Gln Gln Thr Leu Leu Gln Asp Asn Leu
 50           55           60
Leu Gly Arg Val His Phe Asp Gln Phe Lys Glu Ala Leu Ile Leu Ile
65           70           75           80
Leu Ser Arg Thr Leu Ser Asp Glu Glu His Phe Gln Glu Pro Asp Cys
          85           90           95
Ser Leu Glu Ala Gln Pro Arg Tyr Val Arg Gly Glu Lys Pro Tyr Gly
          100           105           110
Arg Arg Ser Leu Pro Glu Phe Gln Glu Ser Val Glu Glu Phe Pro Glu
      115           120           125
Val Thr Val Ile Glu Pro Leu Asp Glu Glu Ala Arg Pro Ser His Ile
      130           135           140
Pro Ala Gly Asp Cys Ser Glu His Trp Lys Thr Gln Arg Ser Glu Glu
145           150           155           160
Tyr Glu Ala Glu Gly Gln Leu Arg Phe Trp Asn Pro Asp Asp Leu Asn
          165           170           175
Ala Ser Gln Ser Gly Ser Ser Pro Pro Gln Asp Trp Ile Glu Glu Lys
          180           185           190
Leu Gln Gln Val Cys Glu Asp Leu Gly Ile Thr Pro Asp Gly His Leu
      195           200           205
Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
      210           215           220
Val Asp Gly Glu Met Leu Glu Glu Val Phe His Asn Leu Asp Pro Asp
225           230           235           240
Gly Thr Met Ser Val Glu Asp Phe Phe Tyr Gly Leu Phe Lys Asn Gly
          245           250           255
Lys Ser Leu Thr Pro Ser Ala Ser Thr Pro Tyr Arg Gln Leu Lys Arg
          260           265           270
His Leu Ser Met Gln Ser Phe Asp Glu Ser Gly Arg Arg Thr Thr Thr
          275           280           285
Ser Ser Ala Thr Thr Ser Thr Ile Gly Phe Arg Val Phe Ser Cys Leu
          290           295           300
Asp Asp Gly Met Gly His Ala Ser Val Glu Arg Ile Leu Asp Thr Trp
305           310           315           320
Gln Glu Glu Gly Ile Glu Asn Ser Gln Glu Ile Leu Lys Ala Leu Asp
          325           330           335
Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
          340           345           350
Glu Asn Glu Leu Leu Val Thr Lys Asn Ser Ile His Gln Ala Ala Leu
          355           360           365
Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
          370           375           380
Val Val Arg Glu Lys Arg Ser Tyr Gly Arg Ile Trp Thr Ala Glu Lys
385           390           395           400
Leu Lys Ser Leu Met Ala Ser Glu Val Asp Asp His Asp Ala Ala Ile

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1951

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Leu Lys Asp Leu Gln Glu Gln Gln Arg Glu Glu Lys Ser Gln Trp Glu		
850	855	860
Phe Glu Lys Asp Glu Leu Thr Gln Glu Cys Ala Glu Ala Gln Glu Leu		
870	875	880
Leu Lys Glu Thr Leu Lys Arg Glu Lys Thr Thr Ser Leu Val Leu Thr		
885	890	895
Gln Glu Arg Glu Met Leu Glu Lys Thr Tyr Lys Asp His Leu Asn Ser		
900	905	910
Met Val Val Glu Arg Gln Gln Leu Leu Gln Asp Leu Glu Asp Leu Arg		
915	920	925
Asn Val Ser Glu Thr Gln Gln Ser Leu Leu Ser Asp Gln Ile Leu Glu		
930	935	940
Leu Lys Ser Ser His Lys Arg Glu Leu Arg Glu Arg Glu Glu Val Leu		
945	950	955
Cys Gln Gln Gly Val Ser Glu Gln Leu Ala Ser Gln Arg Leu Glu Arg		
965	970	975
Leu Glu Met Glu His Asp Gln Glu Arg Gln Glu Met Met Ser Lys Leu		
980	985	990
Leu Ala Met Glu Asn Ile His Lys Ala Thr Cys Glu Thr Ala Asp Arg		
995	1000	1005
Glu Arg Ala Glu Met Ser Thr Glu Ile Ser Arg Leu Gln Ser Lys Ile		
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Lys Glu Met Gln Gln Ala Thr Ser Pro Leu Ser Met Leu Gln Ser Gly		
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Cys Gln Val Ile Gly Glu Glu Glu Val Glu Gly Asp Gly Ala Leu Ser		
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Leu Leu Gln Lys Gly Glu Gln Leu Leu Glu Glu Asn Gly Asp Val Leu		
1060	1065	1070
Leu Ser Leu Gln Arg Ala His Glu Gln Ala Val Lys Glu Asn Val Lys		
1075	1080	1085
Met Ala Thr Glu Ile Ser Arg Leu Gln Gln Arg Leu Gln Lys Leu Glu		
1090	1095	1100
Pro Gly Leu Val Met Ser Ser Cys Leu Asp Glu Pro Ala Thr Glu Phe		
1105	1110	1115
Phe Gly Asn Thr Ala Glu Gln Thr Glu Pro Phe Leu Gln Gln Asn Arg		
1125	1130	1135
Thr Lys Gln Val Glu Gly Val Thr Arg Arg His Val Leu Ser Asp Leu		
1140	1145	1150
Glu Asp Asp Glu Val Arg Asp Leu Gly Ser Thr Gly Thr Ser Ser Val		
1155	1160	1165
Gln Arg Gln Glu Val Lys Ile Glu Glu Ser Glu Ala Ser Val Glu Gly		
1170	1175	1180
Phe Ser Glu Leu Glu Asn Ser Glu Glu Thr Arg Thr Glu Ser Trp Glu		
1185	1190	1195
Leu Lys Asn His Ile Ser Leu Leu Gln Glu Gln Leu Met Met Phe Cys		
1205	1210	1215
Ala Asp Cys Asp Leu Ala Ser Glu Lys Lys Gln Glu Leu Leu Phe Asp		
1220	1225	1230
Val Ser Val Leu Lys Lys Lys Leu Lys Ile Leu Glu Arg Ile Pro Glu		
1235	1240	1245
Ala Ser Pro Arg Tyr Lys Leu Leu Tyr Glu Asp Val Ser Arg Glu Asn		
1250	1255	1260
Asp Cys Leu Gln Glu Glu Leu Glu Met Met Glu Thr Arg Tyr Asp Glu		

1265	1270	1275	1280
Ala Leu Glu Asn Asn Lys Glu Leu Thr	Ala Glu Val Phe Arg Leu Gln		
1285	1290	1295	
Asp Glu Leu Lys Lys Met Glu Glu Val Thr	Glu Thr Phe Leu Ser Leu		
1300	1305	1310	
Glu Lys Ser Tyr Asp Glu Val Lys Ile	Glu Asn Glu Glu Leu Asn Val		
1315	1320	1325	
Leu Val Leu Arg Leu Gln Gly Lys Ile	Glu Lys Leu Xaa Thr Arg Ala		
1330	1335	1340	
Trp Ser Ser Gly Val Thr Ala Ala Tyr Gly	Lys Xaa Ser Leu Glu Asn		
1345	1350	1355	1360
Leu Glu Ile Glu Pro Asp Gly Asn Ile	Leu Gln Leu Asn Gln Thr Leu		
1365	1370	1375	
Glu Glu Cys Val Pro Arg Val Arg Ser Val	His His Val Ile Glu Glu		
1380	1385	1390	
Cys Lys Gln Glu Asn Gln Tyr Leu Glu Gly	Asn Thr Gln Leu Leu Glu		
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Lys Val Lys Ala His Glu Ile Ala Trp Leu	His Gly Thr Ile Gln Thr		
1410	1415	1420	
His Gln Glu Arg Pro Arg Val Gln Asn Gln	Val Ile Leu Glu Glu Asn		
1425	1430	1435	1440
Thr Thr Leu Leu Gly Phe Gln Asp Lys His	Phe Gln His Gln Ala Thr		
1445	1450	1455	
Ile Ala Glu Leu Glu Leu Glu Lys Thr Lys	Leu Gln Glu Leu Thr Arg		
1460	1465	1470	
Lys Leu Lys Glu Arg Val Pro Ile Leu Val	Lys Gln Lys Asp Val Leu		
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Ser Pro Gly Lys Lys Glu Glu Glu Leu Lys	Ala Met Met His Asp Leu		
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Gln Ile Pro Cys Ser Glu Met Gln Gln Lys	Val Glu Leu Leu Lys Tyr		
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Glu Ser Glu Lys Leu Gln Gln Glu Asn Ser	Ile Leu Arg Asn Glu Ile		
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Thr Thr Leu Asn Glu Glu Asp Ser Ile Ser	Asn Leu Lys Leu Gly Thr		
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Leu Asn Gly Ser Gln Glu Glu Met Trp Gln	Lys Thr Glu Ser Val Lys		
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Gln Glu Asn Ala Ala Val Leu Lys Met Val	Glu Asn Leu Lys Lys Gln		
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Ile Ser Glu Leu Lys Ile Lys Asn Gln Gln	Leu Asp Leu Glu Asn Thr		
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Glu Pro Glu Arg Cys Lys Val Gln Ser Ser	Thr Leu Val Ser Ser Leu		
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Glu Asn Pro Leu Leu Gln Asp Glu Leu Glu	Lys Met Lys Gln Leu His		
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Ala Ser Leu Lys Thr Gln Leu Val Ala Ser Gln Glu Lys Val Gln Asn		
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Ser Asp Pro Arg Val Thr Gln Gln Glu Lys Glu Ala Leu Lys Gln Glu		
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Val Met Pro Leu His Lys Gln Leu Gln Asn Ser Val Xaa Lys Ser Trp		
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Arg Leu Ser Trp Asp Lys Leu Asp His Leu Met Asn Glu Glu Gln Gln		
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Lys Ala Glu Leu Thr His Ser Arg Glu Lys Val Arg Gln Leu Glu Ser		
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1890	1895	1900
Asn Pro Thr Glu Gln Glu Lys Leu Ser Leu Lys Arg Glu Cys Asp Gln		
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Phe Gln Lys Glu Gln Ser Pro Ala Asn Arg Lys Val Ser Gln Met Asn		
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1940	1945	1950
Lys Lys Lys Gln Val Lys Leu Asp Glu Gln Leu Met Glu Met Gln His		
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1985	1990	1995
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2005	2010	2015
Leu Gln Glu Glu Leu Glu Asn Arg Thr Ser Glu Thr Asn Thr Pro Gln		
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Gly Asn Gln Glu Gln Leu Val Thr Val Met Glu Glu Arg Met Ile Glu		
2035	2040	2045
Val Glu Gln Lys Leu Lys Leu Val Lys Arg Leu Leu Gln Glu Lys Val		
2050	2055	2060
Asn Gln Leu Lys Glu Gln Val Ser Leu Pro Gly His Leu Cys Ser Pro		
2065	2070	2075
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&lt;210&gt; 2713

&lt;211&gt; 2066

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens



&lt;400&gt; 2713

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&lt;210&gt; 2714

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2714

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			20					25					30		
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Thr	Gly	Leu	Tyr	Glu	Tyr	Lys	Val	Phe	Gly	Val	Leu	Glu	Asp	Cys	Ser
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Thr	Val	Val	Tyr	Trp	Glu	Val	Lys	Tyr	Pro	Phe	Pro	Met	Ser	Asn	Arg
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Asp	Tyr	Val	Tyr	Leu	Arg	Gln	Arg	Arg	Asp	Leu	Asp	Met	Glu	Gly	Arg
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			165					170						175	
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Lys	Asn	Gly	Val	Pro	Asn	Phe	Leu	Lys	Asp	Met	Ala	Arg	Ala	Cys	Gln
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	210														

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 <212> DNA  
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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Glu Met  
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 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly  
 50 55 60  
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln  
 65 70 75 80  
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn  
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<211> 110

<212> PRT

<213> Homo sapiens

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			20					25					30		
Glu	Gly	Pro	Arg	Pro	Glu	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Ala	Gln
		35					40					45			
Thr	Thr	Gly	Glu	Gly	Ala	Gly	His	Arg	Pro	Leu	Thr	Ile	Leu	His	Pro
	50					55				60					
Lys	Thr	Gly	Gly	Gln	Gly	Ser	Asp	Ala	Thr	Leu	Leu	Phe	Val	Lys	Tyr
65				70						75				80	
Gly	Thr	Thr	Phe	Phe	Val	Leu	Phe	Glu	Val	Ser	Ser	Gly	Ser	Lys	Leu
			85					90						95	
Ser	Lys	Trp	Leu	Lys	Asn	Ala	Lys	Cys	Asn	Tyr	Thr	Asp	Leu		
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<211> 546

<212> DNA

<213> Homo sapiens

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 His Val Leu Val Ala His Arg Thr Asp Asn Lys Val His Met Gly Asp  
 35 40 45  
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 50 55 60  
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr  
 65 70 75 80  
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly  
 85 90 95  
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln  
 100 105 110  
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly  
 115 120 125  
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val  
 130 135 140  
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&lt;210&gt; 2722

&lt;211&gt; 508

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2722

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Asp	Arg	Ser	Ala	Leu	Ala	Met	Trp	Leu	Asn	His	Leu	Glu	Asp	Arg	Thr
			20					25					30		
Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val	Asp
		35				40						45			
Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
	50					55					60				
Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
65				70						75				80	
Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
			85						90					95	
Leu	Tyr	Ser	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
			100					105					110		
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
		115				120					125				
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
	130					135					140				
Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala	Arg
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<211> 1221
<212> DNA
<213> Homo sapiens
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120
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 720  
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&lt;210&gt; 2724

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2724

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			20						25				30		
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
			35				40					45			
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
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Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

65					70					75				80	
Leu	Thr	Val	Asn	Pro	Gln	Asp	Asn	Asn	Cys	Leu	Ala	Val	Gly	Ala	Ser
				85					90					95	
Gly	Pro	Phe	Val	Arg	Leu	Tyr	Asp	Ile	Arg	Met	Ile	His	Asn	His	Arg
			100					105					110		
Lys	Ser	Met	Lys	Gln	Ser	Pro	Ser	Ala	Gly	Val	His	Thr	Phe	Cys	Asp
		115					120					125			
Arg	Gln	Lys	Pro	Leu	Pro	Asp	Gly	Ala	Ala	Gln	Tyr	Tyr	Val	Ala	Gly
	130					135					140				
His	Leu	Pro	Val	Lys	Leu	Pro	Asp	Tyr	Asn	Asn	Arg	Leu	Arg	Val	Leu
145				150						155					160
Val	Ala	Thr	Tyr	Val	Thr	Phe	Ser	Pro	Asn	Gly	Thr	Glu	Leu	Leu	Val
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Asn	Met	Gly	Gly	Glu	Gln	Val	Tyr	Leu	Phe	Asp	Leu	Thr	Tyr	Lys	Gln
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		195					200					205			
Val	Gln	Asn	Gly	Lys	Met	Ser	Thr	Asn	Gly	Val	Ser	Asn	Gly	Val	Ser
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Asn	Gly	Leu	His	Leu	His	Ser	Asn	Gly	Phe	Arg	Leu	Pro	Glu	Ser	Arg
225					230					235					240
Gly	His	Val	Ser	Pro	Gln	Val	Glu	Leu	Pro	Pro	Tyr	Leu	Glu	Arg	Val
			245						250					255	
Lys	Gln	Gln	Ala	Asn	Glu	Ala	Phe	Ala	Cys	Gln	Gln	Trp	Thr	Gln	Ala
		260					265						270		
Ile	Gln	Leu	Tyr	Ser	Lys	Ala	Val	Gln	Arg	Ala	Pro	His	Asn	Ala	Met
	275						280					285			
Leu	Tyr	Gly	Asn	Arg	Ala	Ala	Tyr	Met	Lys	Arg	Lys	Trp	Asp	Gly	
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Asp	His	Tyr	Asp	Ala	Leu	Arg	Asp	Cys	Leu	Lys	Ala	Ile	Ser	Leu	Asn
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Pro	Cys	His	Leu	Lys	Ala	His	Phe	Arg	Leu	Ala	Arg	Cys	Leu	Phe	Glu
			325						330					335	
Leu	Lys	Tyr	Val	Ala	Glu	Ala	Leu	Glu	Cys	Leu	Asp	Asp	Phe	Lys	Gly
		340					345						350		
Lys	Phe	Pro	Glu	Gln	Ala	His	Ser	Ser	Ala	Cys	Asp	Ala	Leu	Gly	Arg
	355						360					365			
Asp	Ile	Thr	Ala	Ala	Leu	Phe	Ser	Lys	Asn	Asp	Gly	Glu	Glu	Lys	Lys
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&lt;210&gt; 2725

&lt;211&gt; 856

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2725

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856

&lt;210&gt; 2726

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2726

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		20						25					30		
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35				40						45			
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
		50				55					60				
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75					80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85						90					95	
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
		115					120					125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
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145															

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<212> DNA  
<213> Homo sapiens

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120  
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240  
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300  
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720  
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780  
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840  
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900  
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960  
ccagttcacc tccagatttg atatagggag ccatgccagg gtccagcggt gtaatcatgc  
1020  
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1119

<210> 2728  
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<212> PRT  
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens
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<212> PRT
<213> Homo sapiens
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Leu	Gln	Lys	Leu	Leu	Asp	Tyr	Leu	Thr	Arg	Met	Met	Pro	Gly	Ser	Asp
		50				55						60			
Pro	Glu	Arg	Arg	Ala	Gln	Asn	Leu	Leu	Glu	Gln	Phe	Gln	Lys	Gln	Glu
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Val	Glu	Thr	Asp	Asn	Gly	Leu	Pro	Asn	Thr	Ile	Ser				
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&lt;210&gt; 2731

&lt;211&gt; 447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2731

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447

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&lt;210&gt; 2732

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2732

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Ile	Gly	Val	Thr	Cys	Val	Phe	Pro	Ile	Asp	Leu	Ala	Lys	Thr	Arg	Leu
		20						25					30		
Gln	Asn	Gln	Gln	Asn	Gly	Gln	Arg	Val	Tyr	Thr	Ser	Met	Ser	Asp	Cys
		35				40						45			
Leu	Ile	Lys	Thr	Val	Arg	Ser	Glu	Gly	Tyr	Phe	Gly	Met	Tyr	Arg	Gly
		50				55					60				
Ala	Ala	Val	Asn	Leu	Thr	Leu	Val	Thr	Pro	Glu	Lys	Ala	Ile	Lys	Leu
65				70						75					80
Ala	Ala	Asn	Asp	Phe	Phe	Arg	His	Gln	Leu	Ser	Lys	Asp	Gly	Gln	Lys
				85					90					95	
Leu	Thr	Leu	Leu	Lys	Glu	Met	Leu	Ala	Gly	Cys	Gly	Ala	Gly	Thr	Cys

	100		105		110							
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	115						120					125

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 <211> 3619  
 <212> DNA  
 <213> Homo sapiens

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<210> 2734

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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			20					25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
			35				40					45			
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
	50				55					60					
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65				70				75						80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
			85					90						95	
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100				105						110		
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
		115				120					125				
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
	130					135				140					
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145				150				155						160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
			165				170						175		
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

**1975**

610		615		620
Glu Gln Gln Ala Val	Glu Ala Trp Glu Lys Leu Thr Arg Glu Glu Gly			
625	630	635	640	
Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg				
	645	650	655	
Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu				
	660	665	670	
Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys				
	675	680	685	
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe				
	690	695	700	
Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg				
705	710	715	720	
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu				
	725	730	735	
Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu				
	740	745	750	
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly				
	755	760	765	
Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu				
	770	775	780	
Gln Leu Ser Glu Asp Asp				
785	790			

&lt;210&gt; 2735

&lt;211&gt; 1666

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2735

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180
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240
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480
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720

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1666

&lt;210&gt; 2736

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2736

Met	Ala	Lys	Gln	Tyr	Asp	Val	Leu	Phe	Arg	Leu	Leu	Leu	Ile	Gly	Asp
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Ser	Gly	Val	Gly	Lys	Thr	Cys	Leu	Leu	Cys	Arg	Phe	Thr	Asp	Asn	Glu
		20						25					30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
		35					40					45			
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
	50					55					60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65					70					75				80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
				85					90					95	
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
			100					105					110		
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

	115					120						125							
Arg	Gln	Val	Gly	Arg	Glu	Gln	Gly	Gln	Gln	Lys	Cys	Pro	Ser	Leu	Gln				
	130					135					140								
Leu	Ala	Lys	Glu	Tyr	Gly	Met	Asp	Phe	Tyr	Glu	Thr	Ser	Ala	Cys	Thr				
145					150					155				160					
Asn	Leu	Asn	Ile	Lys	Glu	Ser	Phe	Thr	Arg	Leu	Thr	Glu	Leu	Val	Leu				
				165					170					175					
Gln	Ala	His	Arg	Lys	Glu	Leu	Glu	Gly	Leu	Arg	Met	Arg	Ala	Ser	Asn				
			180					185					190						
Glu	Leu	Ala	Leu	Ala	Glu	Leu	Glu	Glu	Glu	Gly	Lys	Pro	Glu	Gly					
	195					200						205							
Pro	Ala	Asn	Ser	Ser	Lys	Thr	Cys	Trp	Cys										
	210					215													

&lt;210&gt; 2737

&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2737

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 420  
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 780  
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 840  
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 898

&lt;210&gt; 2738

&lt;211&gt; 299

&lt;212&gt; PRT



&lt;213&gt; Homo sapiens

&lt;400&gt; 2738

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Xaa Pro Val Cys Ala Thr Cys Ala Gly Phe Gly Gly Arg Cys His Arg
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His Arg Ile Arg Arg Ala Glu Glu His Ala Glu Glu Leu Arg Asn Lys
          20           25           30
Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr
          35           40           45
Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
          50           55           60
Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
        65           70           75           80
Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
          85           90           95
Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
          100          105          110
Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
          115          120          125
Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
          130          135          140
Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
        145          150          155          160
Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
          165          170          175
Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
          180          185          190
Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
          195          200          205
Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
          210          215          220
Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
        225          230          235          240
Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
          245          250          255
Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
          260          265          270
Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
          275          280          285
Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser
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&lt;210&gt; 2739

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2739

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180

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1320  
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1380  
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a  
1501

&lt;210&gt; 2740

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2740

Glu Ser Arg Arg Glu Trp Gly Ala Met Ala Lys Leu Arg Val Ala Tyr

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Glu Tyr Thr Glu Ala Glu Asp Lys Ser Ile Arg Leu Gly Leu Phe Leu			
	20	25	30
Ile Ile Ser Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu			
	35	40	45
Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val			
	50	55	60
Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys			
65	70	75	80
Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr			
	85	90	95
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu			
	100	105	110
His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys			
	115	120	125
Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr			
	130	135	140
Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln			
145	150	155	160
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile			
	165	170	175
Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly			
	180	185	190
Val Leu Ile Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys			
	195	200	205
Ala Glu Ala Met Lys Lys Arg Lys Phe Ser			
	210	215	

&lt;210&gt; 2741

&lt;211&gt; 1487

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2741

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600

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 1380  
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 1487

<210> 2742  
 <211> 163  
 <212> PRT  
 <213> Homo sapiens

<400> 2742  
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 20 25 30  
 Lys Phe Ser Cys Cys Gly Gly Ile Ser Tyr Lys Asp Trp Ser Gln Asn  
 35 40 45  
 Met Tyr Phe Asn Cys Ser Glu Asp Asn Pro Ser Arg Glu Arg Cys Ser  
 50 55 60  
 Val Pro Tyr Ser Cys Cys Leu Pro Thr Pro Asp Gln Ala Val Ile Asn  
 65 70 75 80  
 Thr Met Cys Gly Gln Gly Met Gln Ala Phe Asp Tyr Leu Glu Ala Ser  
 85 90 95  
 Lys Val Ile Tyr Thr Asn Gly Cys Ile Asp Lys Leu Val Asn Trp Ile  
 100 105 110  
 His Ser Asn Leu Phe Leu Leu Gly Gly Val Ala Leu Gly Leu Ala Ile  
 115 120 125  
 Pro Gln Leu Val Gly Ile Leu Leu Ser Gln Ile Leu Val Asn Gln Ile

130                      135                      140  
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp  
 145                      150                      155                      160  
 Pro Trp Tyr

<210> 2743  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

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 180  
 ccattctcgc ccagagccta ccaagactga ggtgtccagt ctccacctgg agcctcccga  
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 20                      25                      30  
 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val  
 35                      40                      45  
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<210> 2745  
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 <213> Homo sapiens

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&lt;210&gt; 2746

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2746

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			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
			35				40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
			50			55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70					75				80	
Pro	Ser	His	His	Ser	Gln	Glu	Gly	Pro	Phe	Pro	Pro	Gly	Glu	Lys	Leu
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Pro Asp

&lt;210&gt; 2747

&lt;211&gt; 1100

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2747

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<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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			20					25				30			
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35					40				45				
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50					55				60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65				70				75			80				
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
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	100		105		110										
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	115		120		125										
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	130		135		140										
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Lys	Leu	Leu	Asn	Asp	Leu	Asn	Gly	Ala	Val	Glu	Asp	Ala	Lys	Thr	Ala
			165		170									175	
Arg	Leu	Phe	Asn	Ile	Thr	Ser	Ser	Ala	Leu	Ala	Ala	Ser	Cys	Ile	Ile
			180		185									190	
Leu	Val	Phe	Ile	Phe	Leu	Arg	Tyr	Pro	Leu	Thr	Asp	Tyr			
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&lt;210&gt; 2749

&lt;211&gt; 2050

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2749

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&lt;210&gt; 2750

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2750

Met	Asn	Thr	Ser	Pro	Gly	Thr	Val	Gly	Ser	Asp	Pro	Val	Ile	Leu	Ala
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Thr	Ala	Gly	Tyr	Asp	His	Thr	Val	Arg	Phe	Trp	Gln	Ala	His	Ser	Gly
			20					25				30			
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35					40					45			
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
		50				55					60				
Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65					70				75					80	
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

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<210> 2751
<211> 1877
<212> DNA
<213> Homo sapiens
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&lt;210&gt; 2752

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2752

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 Thr Pro Ala His Ala Pro Thr Xaa Pro Glu Thr Ala Arg Ser Ala Arg  
 20 25 30  
 Thr Ala Pro Arg Ser Ala Ile Thr Arg Arg Ala Phe Thr Ser Thr Arg  
 35 40 45  
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser  
 50 55 60  
 Gly Leu Ser Pro Thr Ala Ser Arg Pro Ala Arg Cys Arg Ala Pro Gly  
 65 70 75 80  
 Arg Ser Ser Thr Ile Ile Thr  
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&lt;210&gt; 2753

&lt;211&gt; 2561

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2753

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&lt;210&gt; 2754

<211> 731  
 <212> PRT  
 <213> Homo sapiens

<400> 2754

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His Pro Thr Ala Pro Cys Ile Gln Glu Phe Leu Thr Leu Leu Ala Val
 35           40           45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
 50           55           60
Ala Ser Ser Pro Asp Glu Ala Ala Leu Val Lys Gly Ala Lys Lys Leu
 65           70           75           80
Gly Phe Val Phe Thr Ala Arg Thr Pro Phe Ser Val Ile Ile Glu Ala
 85           90           95
Met Gly Gln Glu Gln Thr Phe Gly Ile Leu Asn Val Leu Glu Phe Ser
 100          105          110
Ser Asp Arg Lys Arg Met Ser Val Ile Val Arg Thr Pro Ser Gly Arg
 115          120          125
Leu Arg Leu Tyr Cys Lys Gly Ala Asp Asn Val Ile Phe Glu Arg Leu
 130          135          140
Ser Lys Asp Ser Lys Tyr Met Glu Glu Thr Leu Cys His Leu Glu Tyr
 145          150          155          160
Phe Ala Thr Glu Gly Leu Arg Thr Leu Cys Val Ala Tyr Ala Asp Leu
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Ser Glu Gly Asn Glu Tyr Glu Glu Trp Leu Lys Val Tyr Gln Glu Ala
 180          185          190
Ser Thr Ile Leu Lys Asp Arg Ala Gln Arg Leu Glu Glu Cys Tyr Glu
 195          200          205
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 210          215          220
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 260          265          270
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 275          280          285
His Cys Thr Asp Leu Gly Asn Leu Leu Gly Lys Glu Asn Asp Val Ala
 290          295          300
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Lys Arg Val Lys Ala Ile Thr Leu Ala Ile Gly Asp Gly Ala Asn Asp
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&lt;210&gt; 2755

&lt;211&gt; 4795

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2755

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&lt;210&gt; 2756

&lt;211&gt; 550

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2756

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Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
      35           40           45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
      50           55           60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
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Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
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Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
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Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
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Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
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Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
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Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
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Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
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Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
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Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
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Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
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Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
      340          345          350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
      355          360          365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
      370          375          380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
385          390          395          400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
      405          410          415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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Ser Glu Lys Pro Ser Thr Ala His His Arg Pro Leu Arg Ser Ile Ala
          450          455          460
Arg Phe Ser Ser Lys Ser Lys Ser Met Asp Lys Ser Asp Glu Glu Leu
465          470          475          480
Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
          485          490          495
Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
          500          505          510
Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
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<210> 2758  
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 <212> PRT  
 <213> Homo sapiens

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20      25      30
Asn Thr Thr Glu Ser Ile Trp Ala Cys Leu Ser Cys Ser His Val Ala
35      40      45
Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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<210> 2759  
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 Arg Pro Glu Pro Gln Arg Pro Arg Asn Arg Pro Tyr Phe Gln Arg Arg  
 35                      40                      45  
 Arg Gln Gln Ala Pro Gly Pro Gln Gln Ala Pro Gly Pro Arg Gln Pro  
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<210> 2761  
 <211> 922  
 <212> DNA  
 <213> Homo sapiens

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 <212> PRT  
 <213> Homo sapiens

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 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu  
 35 40 45  
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu